VOLUME LII NUMBER SIX

THE NATIONAL GEOGRAPHIC MAGAZINE

DECEMBER, 1927

CONTENTS

TWENTY-FOUR PAGES OF ILLUSTRATIONS IN FULL COLOR

The Pageant of Jerusalem
With 56 Illustrations — MAJOR EDWARD KEITH-ROACH

Color Records from the Changing Life of the Holy City
With 27 Autochromes — MAYNARD OWEN WILLIAMS

East of Suez to the Mount of the Decalogue
With 33 Illustrations — MAYNARD OWEN WILLIAMS

The Geography of Money
With 31 Illustrations — WILLIAM ATHERTON DU PUY

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IMMEDIATELY after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. Four expeditions have followed and the extraordinary scientific data resulting given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures. As a result of The Society's discoveries this area has been created a National Monument by proclamation of the President of the United States.

AT an expense of over $50,000 The Society sent a notable series of expeditions into Peru to investigate the traces of the Inca race. Their discoveries form a large share of our knowledge of a civilization waning when Pizarro first set foot in Peru.

THE Society also had the honor of subscribing a substantial sum to the expedition of Admiral Peary, who discovered the North Pole.

NOT long ago The Society granted $25,000, and in addition $75,000 was given by individual members to the Government when the congressional appropriation for the purpose was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people.

THE Society is conducting extensive explorations and excavations in northwestern New Mexico, which was one of the most densely populated areas in North America before Columbus came, a region where prehistoric peoples lived in vast communal dwellings and whose customs, ceremonies, and name have been engulfed in an oblivion.

TO further the important study of solar radiation in relation to long-range weather forecastings, The Society has appropriated $60,000 to enable the Smithsonian Institution to establish a station for four years on Mt. Brukkaros, in Southwest Africa.

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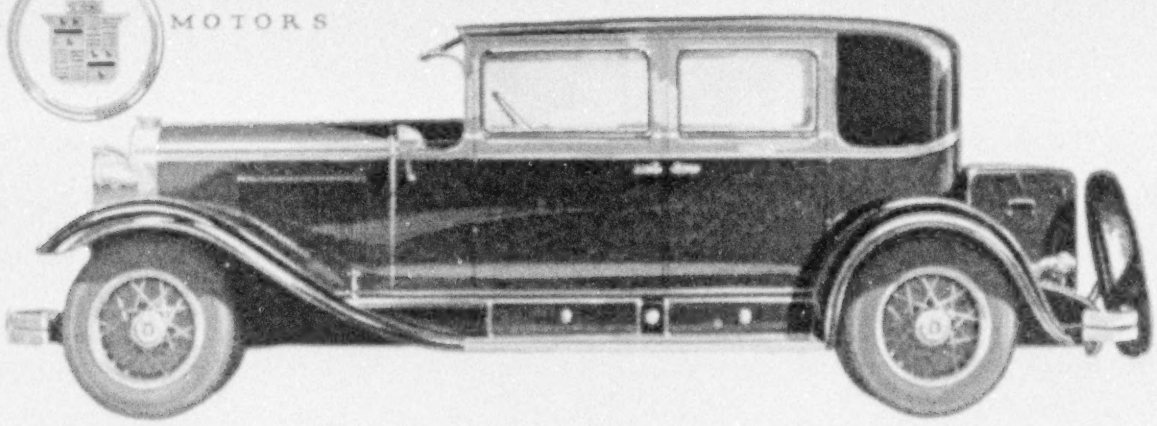

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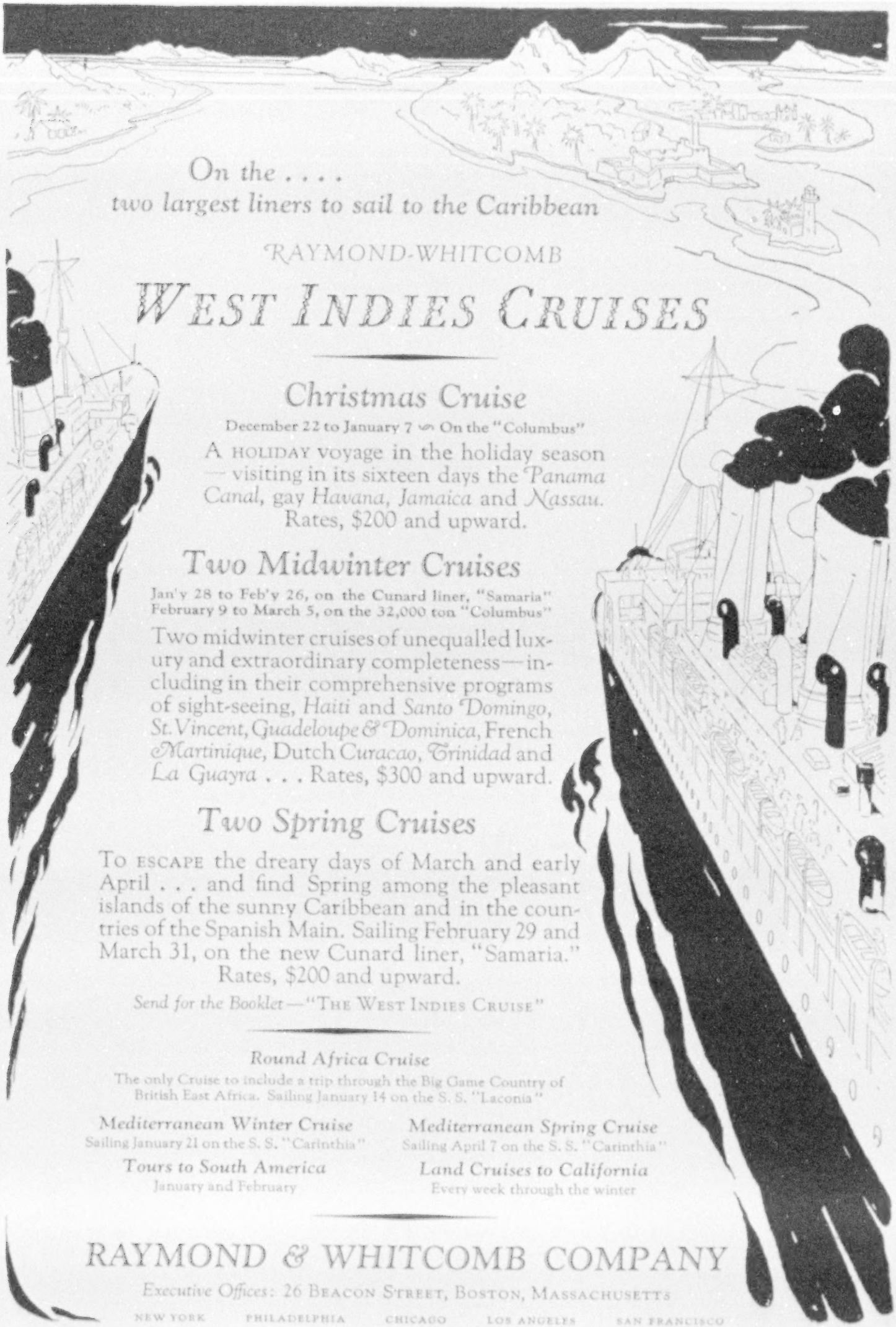

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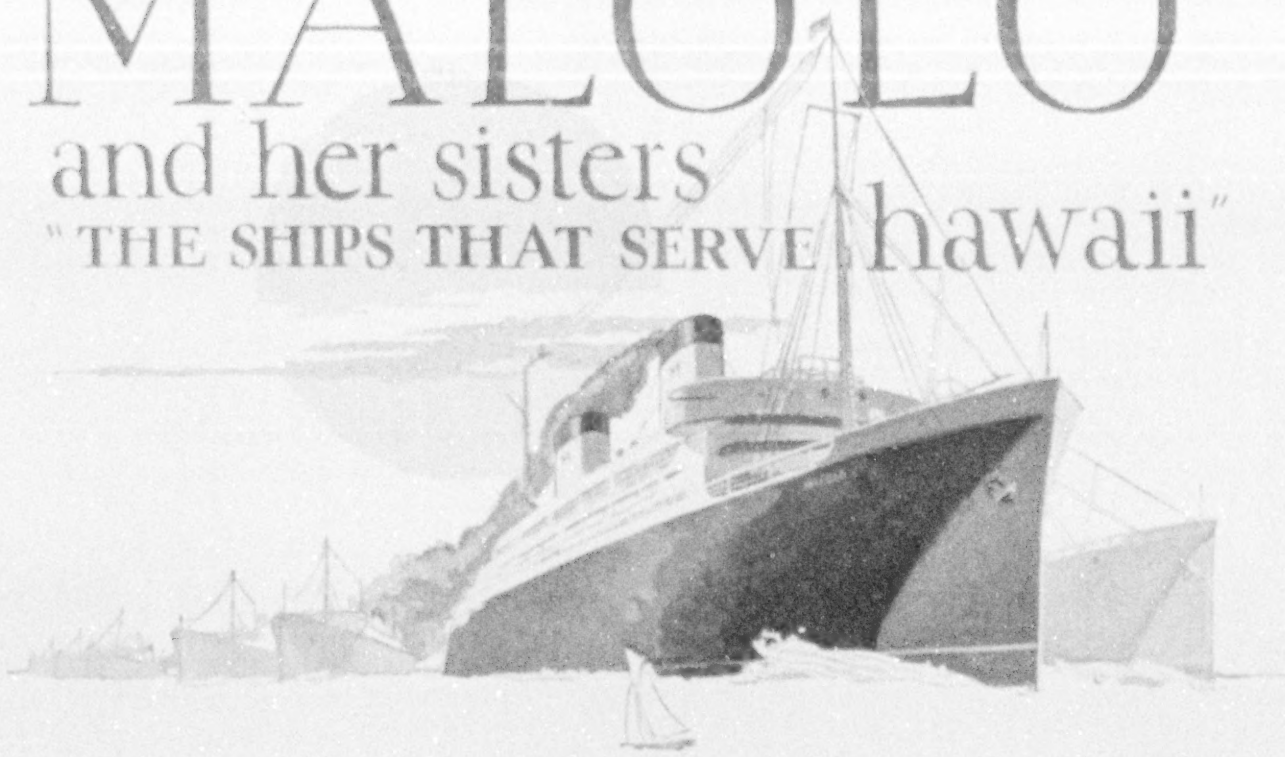

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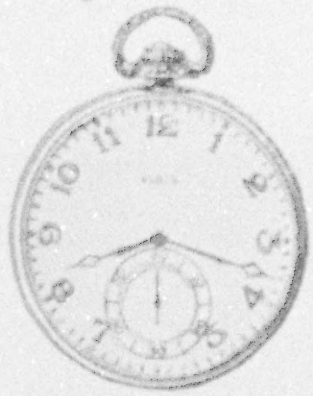

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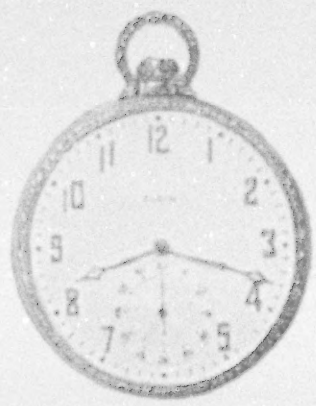

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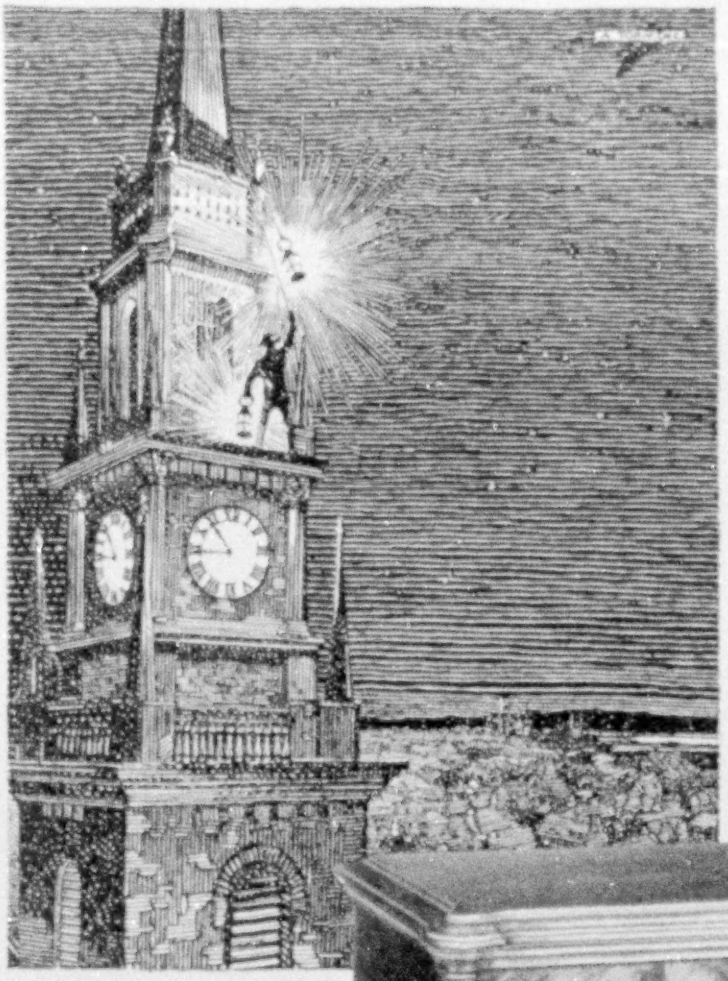

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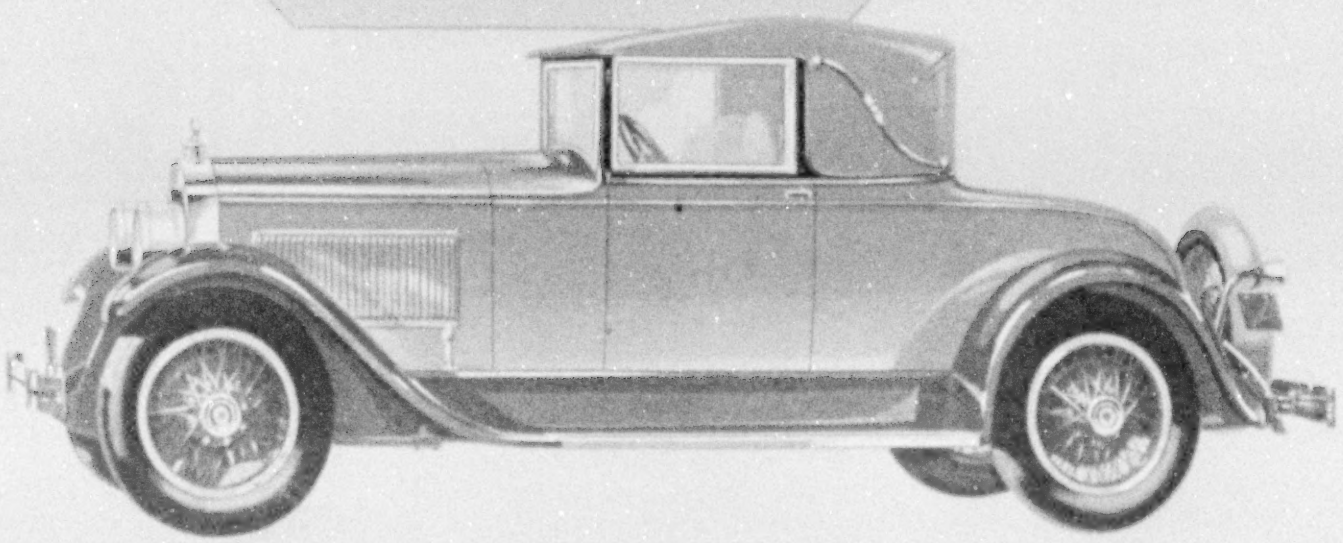

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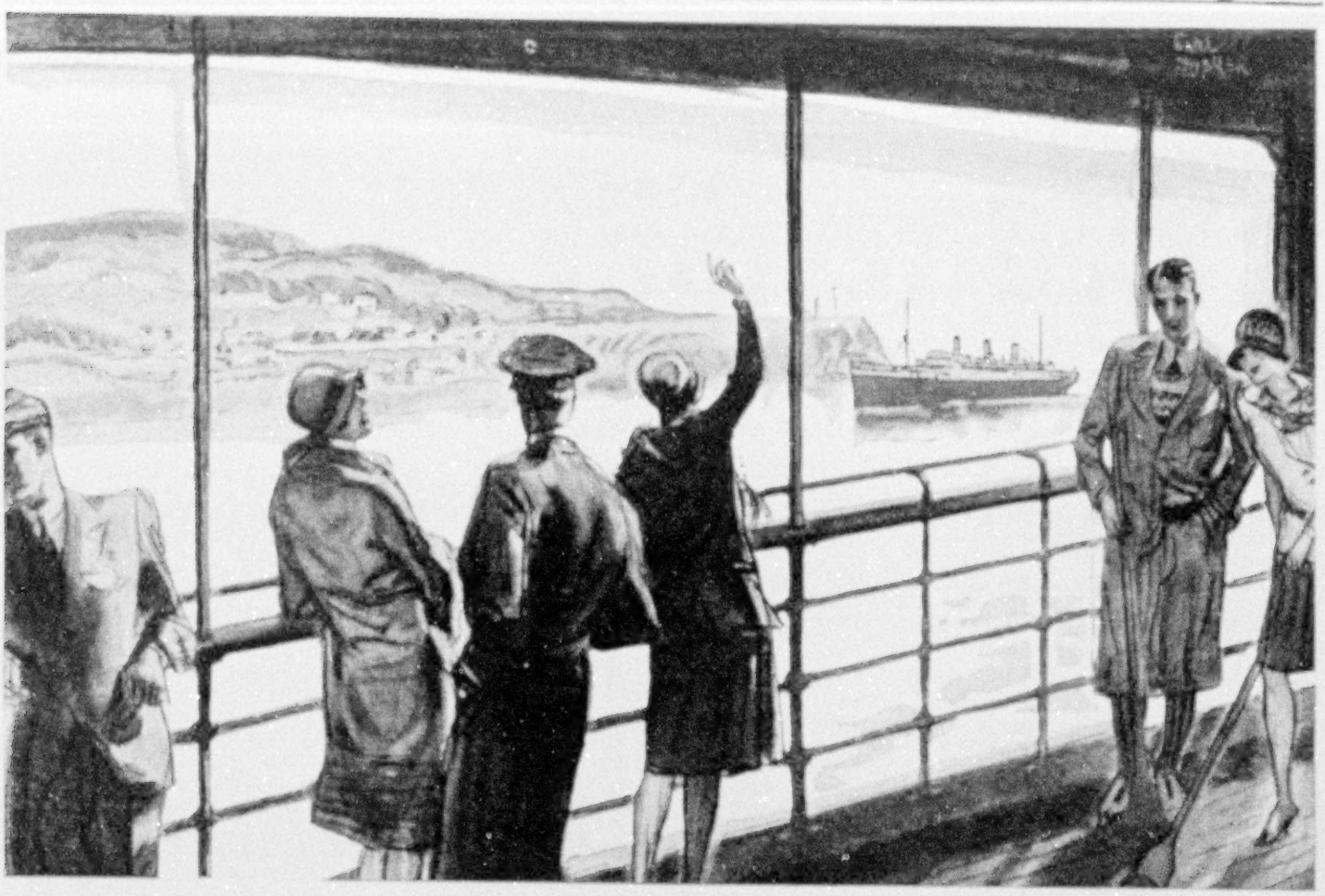

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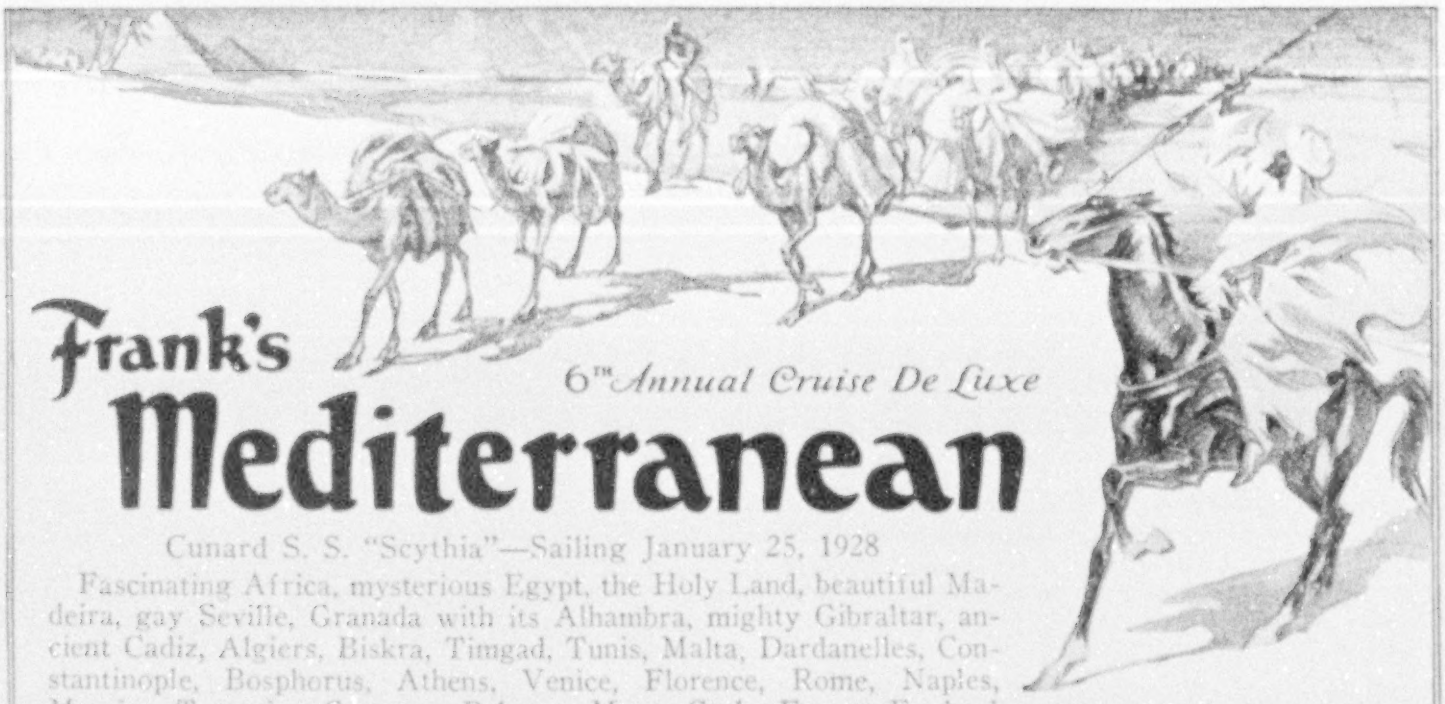

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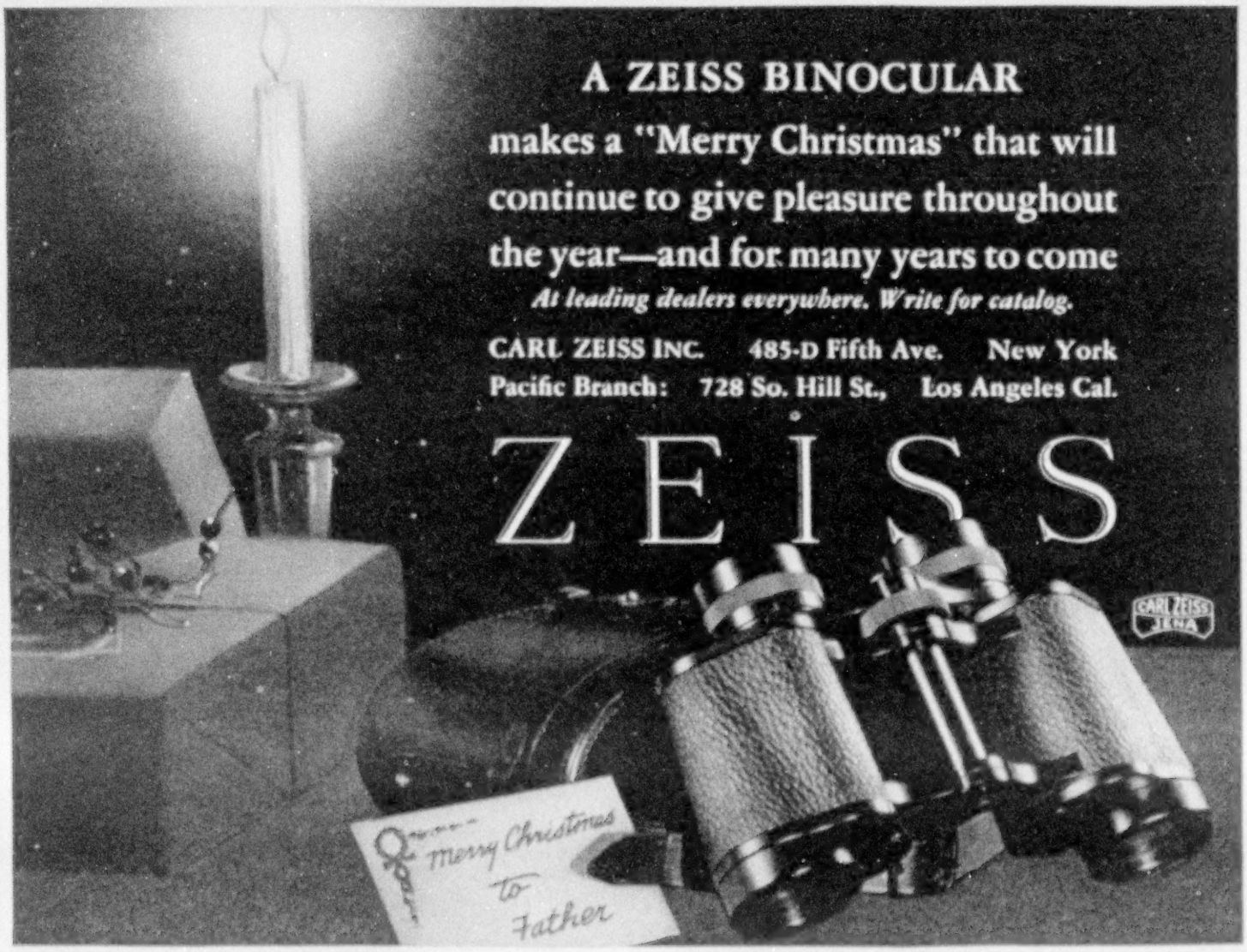

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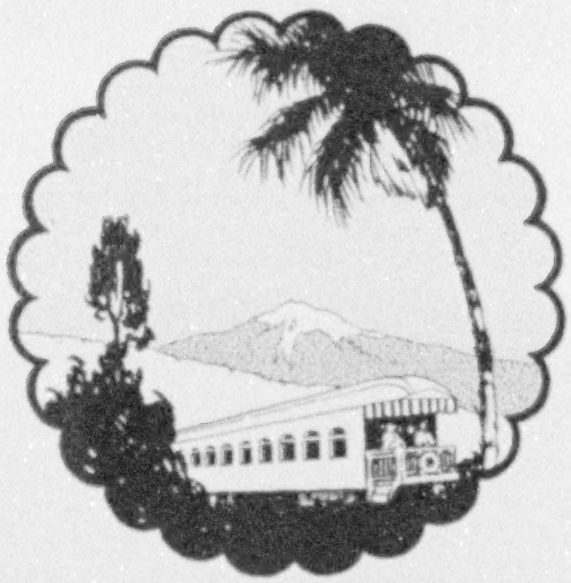

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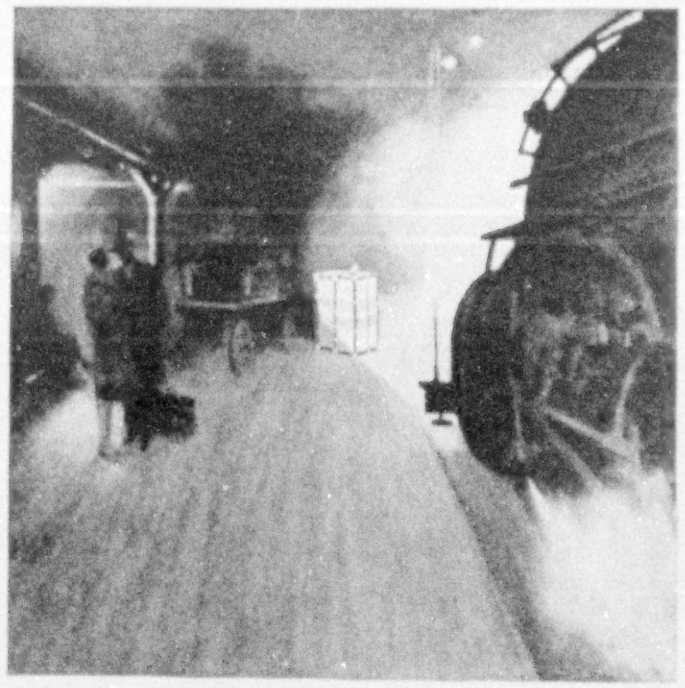

IT IS NATURAL ENOUGH to ask the cost of an Oshkosh Trunk before you have seen one. Afterwards—well, somehow the price really doesn't seem to matter!

An attractive descriptive booklet, "Your Home Away From Home," will be sent you on request to 473 High Street, Oshkosh, Wisconsin.

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Spend this

Christmas

UNDER *the*

Orange Trees

of Southern California

HOLIDAY memories that will last a lifetime—Christmas among fruit-laden orange trees, or in gardens aglow with brilliant poinsettias *and roses!* Hillsides green with verdure, roadsides lined with red-berried pepper trees; a mile of gaily lighted giant Christmas trees at Altadena; snow-laden mountains in the distance. An astounding yuletide picture! A different Christmas—you will find it in *Southern* California.

From far behind the glistening snow peaks comes the Spirit of Christmas into this balmy, spring-like Southland, spreading glad carols, gifts, and festive turkey feasts! *Everything*—and more than a night-before-Christmas dream could promise!

What a day to be in Southern California—and all the wonderful week that follows, with Pasadena's Tournament of Roses and the East-West football game on New Year's Day. The Los Angeles Open Golf Tournament is held Jan. 6-7-8.

Here, amid the sunshine and flowers of Southern California, you will find new scenes—new things to do. Take limitless scenic motor trips; visit Old Spanish Missions; golf on *evergreen* links; thrill at the quiet of a colorful winter desert or the rolling surf of the blue Pacific!

Decide quickly—as you read this. Be here well before Christmas Eve!

Come and see the remarkable growth of Los Angeles—gay metropolis of the Pacific Coast. You will marvel at the industrial development of Los Angeles County—one of the country's richest in natural resources.

Ask your nearest ticket agent now for more complete information. Plan to come directly to Los Angeles and return via Santa Barbara, Oakland, San Francisco, Portland Tacoma, Seattle, Spokane. See the entire Pacific Coast.

WE HAVE issued a complete book on all-year vacations, 52 pages, illustrated, telling just what you can see and do in this strange land. Send the coupon.

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All Year Club of Southern California,
Dept. E-12, Chamber of Commerce Bldg.,
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Please send me your free booklet about Southern California vacations. Also booklets telling especially of the attractions and opportunities in the counties which I have checked.

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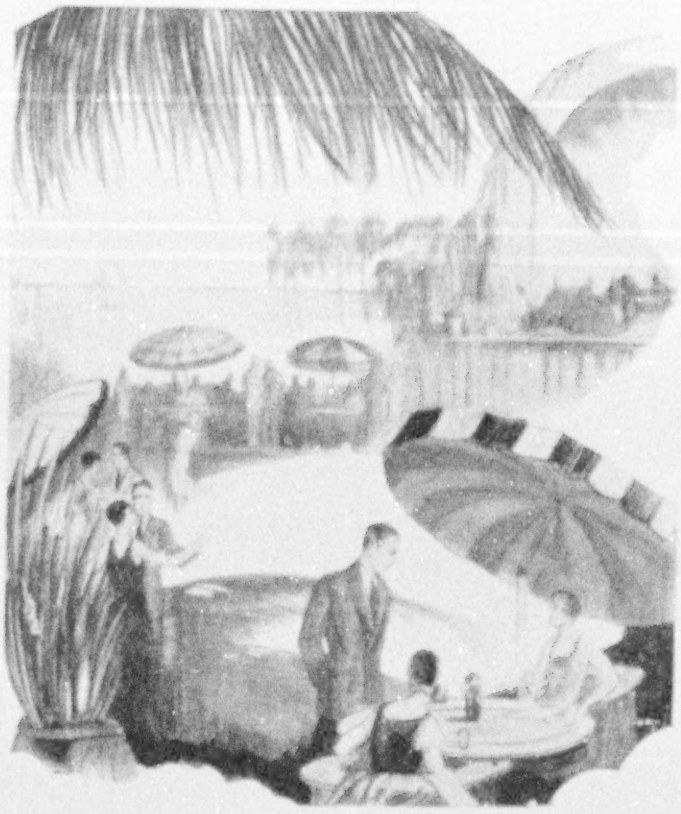

Enjoy this Winter Under Summer Skies

KNOW the joys of a healthful, happy winter out-of-doors!

Revel in *Sunshine* --summer togs --summer sports. Golf on Miami's dozen sporty courses --Thrill to soothing daily dips in the Atlantic -- Fish for the deep sea fighters of the Gulf Stream. Tennis, polo, horseback riding, racing, yachting--every out-door pastime awaits you in Miami.

Exotic nights -- golden moon --dancing under waving palms: theatres, concerts, opera!

Rendezvous for Young America --Haven of rest and recuperation for tired bodies and shattered nerves.

Miami is prepared this year to accommodate hundreds of thousands of visitors, comfortably and economically. Hotel rates and rentals have been revised, reduced and standardized. Transportation facilities better than ever before. Fast, through de-luxe Pullmans from all Metropolitan cities: Palatial liners from Eastern ports; or, if you wish, motor down in a few days over the new Federal Highway.

You may make reservations for hotel or apartment accommodations or furnished cottages through official northern booking offiices maintained for your convenience.

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Imagine sitting on porch or lawn seat—unmuffled—in mid-December or January; think of children's classes in the open, fresh air and sunshine; of golf when even a jacket feels cumbersome; of rides into the mountains over hard, dry roads—

For over thirty years December, January and February have averaged less than four cloudy days each.

The clear, dry air compels a revision of one's ideas of temperature. An official 48 may mean over 90 in the sun.

Those sent here for health or rest, who use the free stop-over or side-trip privilege granted on transcontinental trips, become enthusiastic in a new conception of "a winter day."

Know more about this region. Ask about the city — Homes — "Winning Health" — "100 Winter Days." Check item or write—

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Manitou and the Pikes Peak Region

Youth returns on "Isle of June"

Quaint, lovely and unspoiled, "Isle of June" awaits your coming: music in golden sunlight, music in silver night, on cay-reefs where surf thunders wild symphonies to eerie cries of sea-birds, in palms when, with rustle of silk, scented winds play invisible harps. Come down to laughter and youth *in old Nassau!*

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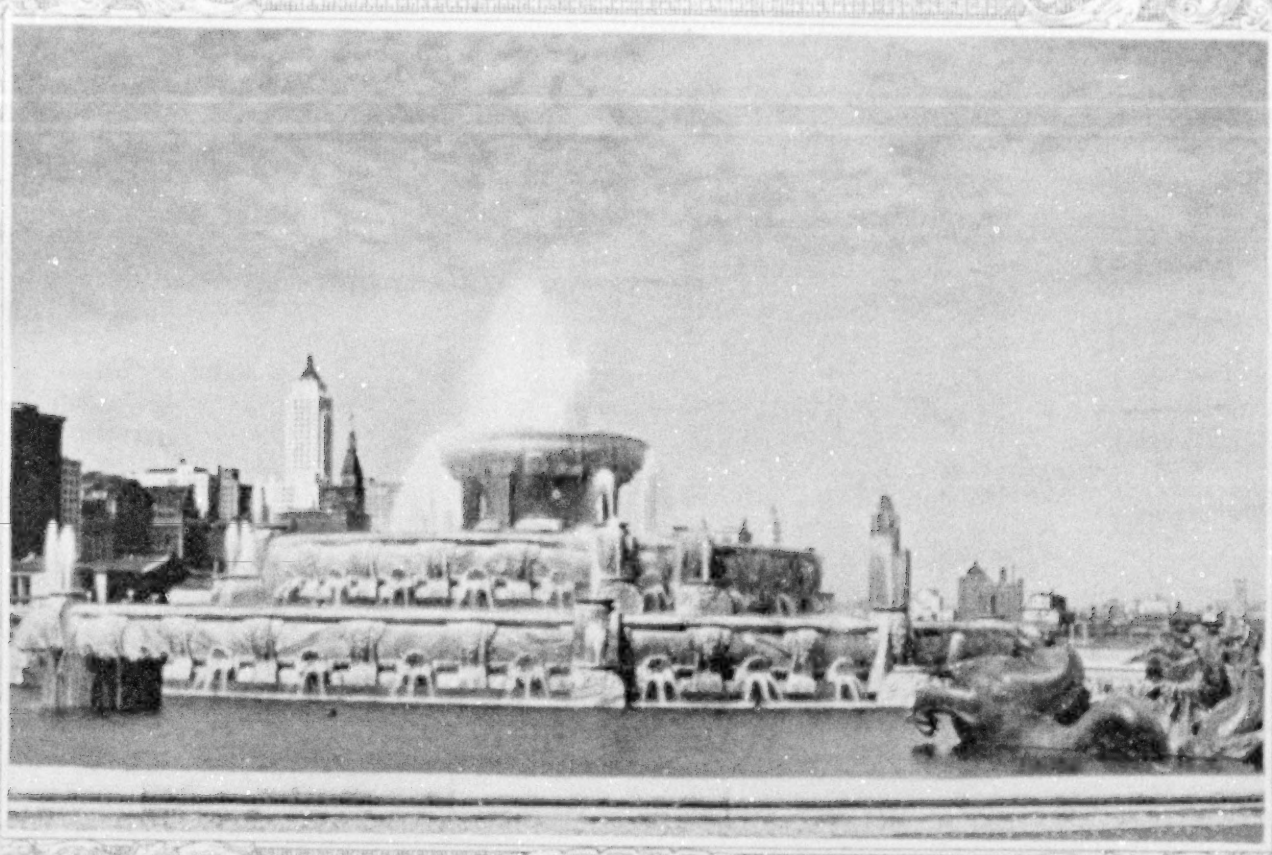
NASSAU

BAHAMAS "Isle of June"



BUCKINGHAM
-MEMORIAL FOUNTAIN-
CHICAGO
BENNET, PARSONS & FROST
ARCHITECTS

Photographed by
HENRY FUERMAN & SON

ALL of the beauty and grandeur that graced the gardens of the Bourbon kings, that most magnificent era of French history, is combined in the Buckingham Memorial Fountain.

Many times larger than the famed Latonia Fountain at Versailles, it is the most beautiful and elaborate fountain of ancient or modern times. The main pool is three hundred feet across, and the highest of its multitudinous jets send a silver stream of water one hundred and ten feet into the air.

Two considerations influenced the selection of Pink Georgia Marble for the construction of this fountain. First—its delicate rose tint was beautifully suited to this purpose. Second—Georgia Crystalline Marble is the least absorptive of all stones and even constant contact with flowing water leaves it unstained and unmarred.

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And when used in connection with California travel, "low altitude" means "perfect comfort."

"You can't beat Golden State Limited service," says the Colonel, "and just now I particularly appreciate a feature that many people overlook—It's first to summer sunshine."

63 hours Chicago-California. Shortest and quickest to Phoenix and San Diego.

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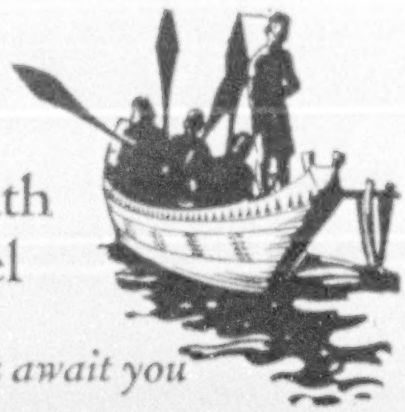

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WHERE LIFE IS BETTER

What kind of birds are in YOUR *garden this winter?*

Mocking birds? Fat plumed quail? Purple-throated linnets? The Californian knows them all, even in city suburbs.

THE statistics of average property-wealth, average savings deposits, average automobile ownership—of all the things that denote prosperity—show that Californians are about *twice* as well off as the average American family. Where five million people are so prosperous, there is room and opportunity for more who can bring with them enough ability and capital to assure a good start.

Look it over this Winter

Come to San Francisco and see how busy we are, and how the opportunities are growing.

Here is an authentic letter from a family who have proved it for themselves:

"*San Francisco,*
"*September 6, 1927.*

"We came to California from one of the prairie states, and rented a home for the palm tree that stood in the front yard. Last winter was the second we have spent in California, and it seemed wonderful again just to go outdoors to a green lawn on which a flake of snow has never fallen; to send the children to school without mittens; to see gay-colored birds bathing in the garden fountain in mid-winter.

"Yet we can have snow, too, and go tobogganing on week-ends, just by a few hours' motor trip to Yosemite in winter, and come back home to a day of golf or tennis. There is more in California than a busy man's family can find time to enjoy, but on week-ends and summer vacations we are discovering ocean beaches and mountain lakes and little valleys covered with orchards—delightful places different from anything we have known before.

"All these opportunities for fun could not mean as much to us, of course, if it had been hard to get a start in business in San Francisco. But even in the short time since we came, it has been possible for me to get further ahead in my business than I could have done in an equal time back East. (*Name on request*) L. H. E."

What *every San Franciscan* owns:

Climate: Average 59° in summer; 51° in winter. Less rain falls in San Francisco's wettest month (January) than in Atlantic Coast cities in July. No extremes of heat or cold.

Recreation: San Francisco is America's coolest summer city. At the middle of a thousand miles of seacoast, and the hub of railroads and highways leading to four national parks and millions of acres of mountain playgrounds.

Markets: Geographical and commercial center of Pacific Coast. The chief seaport, carrying 40% of all imports and exports. Over 1,000,000 people in the San Francisco metropolitan area.

Industry: San Francisco Bay District's manufacturing production exceeds a billion dollars a year.

Growth: Seven times as great, from 1921 to 1926, as the rate of growth of the country at large—seven times as many new customers each year for San Francisco business.

Art, Music, Literature: The cultural capital of the West with a widespread artistic, musical and literary life among its people. One of the three colorful "story cities" of America.

Crop Wealth: The outlet and commercial headquarters for bulk of California's $700,000,000 annual farm production.

For every San Franciscan, here or on the way, these advantages spell *opportunity*

Mt. Tamalpais, across San Francisco Bay

Send for this Book

CALIFORNIANS INC., a non-profit organization of citizens and business firms interested in the sound development of the State, has published an interesting 48-page illustrated booklet, "California, Where Life is Better." It is free—send for it with the coupon below.

California

A sailor of the seven seas returns to his home port—San Francisco

MAIL *this coupon for* FREE BOOKLET *about life in California*

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Californians Inc.
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Please send me "California, Where Life is Better"

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At Left: W. C. Ball Family Mausoleum, Beech Grove Cemetery, Muncie, Indiana.

Below: Memorial Urn—Ferncliff Cemetery, Springfield, Ohio. Stony Creek Granite, all polished.

A TELLING adaptation of classic architecture is found in the dignified mausoleum here illustrated. "To build to endure, with beauty," for over sixty years our slogan, is here exemplified. Such work eternalizes itself by sheer strength and charm.

Write for book "Modern Memorial Art"

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Mount Hood, Oregon, 11,225 feet high, with Lost Lake in the foreground. A scene of grandeur, beauty of composition and nature colorings, interpreted by Hicks-Chatten in the finest work of the photo engravers' art. Size 36 x 14 for framing. At art stores or postpaid direct from Hicks-Chatten $4

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Your request brings this booklet, "A New Art in Pictures." It shows miniatures of these ten selected pictures, describes them interestingly, gives sizes, prices, etc. Address Hicks-Chatten Engraving Co., 45 Fourth St., Portland, Ore.

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—a lasting gift
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A small deposit puts it in your home. Then pay a little each month under liberal General Motors terms. Be sure you see the nameplate —"Frigidaire—Product of General Motors." Then there will be no regrets later on.

Give her a *real* thrill this Christmas!

With a gift of a Frigidaire

Use part of your Christmas savings to cover the first small payment!

OF course, she's a regular fellow and will like whatever you give her. But here's a chance to do something handsome and provide a *real* Christmas thrill!

It's so easy. The price of a few Christmas knick-knacks will put a Frigidaire Electric Refrigerator in your home. Think of it! A gift that lasts for many years to come. A gift that she'll use every day in the year. A gift that's a constant reminder of what a good fellow *you* are.

Forego the usual last-minute shopping this Christmas. Avoid the hurrying crowds. Spend a few leisurely moments in a nearby Frigidaire Sales Room. When you leave, the stage will be set for a Christmas she'll remember for years.

So don't hold back at Christmas time. Do the handsome thing this year. But *do it now*—while Frigidaire Distributors can still promise Christmas deliveries.

Frigidaire, by all standards of comparison, costs less than any other electric refrigerator nationally distributed.

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A PRODUCT OF GENERAL MOTORS

Music that memory keeps

DAGGERS, embroidered doublets, jeweled silks . . . poisons in golden cups . . . a torch-lit sword . . . murder, love, envy . . . moonlight on palaces . . . all the rich pageantry of Christian Rome caught up in music—the sensuous, unforgettable music of "Rienzi."

Here is music, good music, of the sort that one remembers—at once vivid, melodious, and finely conceived. The "Rienzi" Overture is one of the outstanding compositions of Wagner's early period—and particularly interesting for its foreshadowing of what was to come. It is played (on Red Seal Records Nos. 6624-5) with striking power and beauty by Leopold Stokowski and the Philadelphia Symphony Orchestra. In all respects it is a musical achievement—worthy of a place in every home where good music is known and appreciated.

No matter where you live, or how often you desire, you can enjoy the world's best music and most distinguished artists on Victor Red Seal Records. The new Orthophonic method of recording has attained a degree of tone, sensitivity and fidelity to the original, that is simply amazing. They are *utterly realistic!* . . . The nearest Victor dealer will be glad to play any Red Seal Record for you. *Write today for the illustrated booklet, "A Musical Galaxy," with foreword by Leopold Stokowski—a commentary on six of the greatest moments in music.* Victor Talking Machine Company, Camden, N. J., U. S. A.

VICTOR

THE above interpretation (by Eduard Buk Ulreich) of the *Rienzi* Overture is conceived very much in the spirit of the opera itself. The scene is laid in medieval Rome. *Rienzi*, last of the tribunes, has been turned upon by the mob which he befriended, and his palace is in flames. The manner of the painting, consciously *naive*, suggests that of the Italian masters of the early Renaissance. Both music and painting are marked with the sensuous and magnificent beauty of the period.

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THE FIRE BIRD, *painted for the* STEINWAY COLLECTION *by* ROCKWELL KENT

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Yet with the single exception of the concert grand, every one of the six Steinway models is a home piano, designed to meet a special condition of income or acoustics. Each is a true Steinway, incomparably rich in tone, magnificently responsive. It will serve you, as only the best things can serve you, all your days. And *there* lies the real index of economy. You need never buy another piano.

There is a Steinway dealer in your community, or near you, through whom you may purchase a new Steinway piano with a small cash deposit, and the balance will be extended over a period of two years. Used pianos accepted in partial exchange.

Prices: $875 *and up*

Plus transportation

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"It has been in this house fifty years. You can't find another piece like it. This, ladies and gentlemen, is genuine! What am I offered for it? These old treasures are going for a song. Give me a bid."

—While the auctioneer rattles on, some of the neighbors think of the old days of entertainment and open hospitality in that house. They wonder how long the proud and lonely mistress has been fighting off the inevitable. Inside, she hears the auctioneer's words—"genuine", "fifty years in this house", "old treasures"—every word a thrust to her heart.

©1927 M. L. I. Co.

BABIES and old people are life's widest contrast and life's closest comparison. The younger they are and the older they are the more they need our love and care. For the helpless baby it is a sunny world—there is always someone to take care of him.

But it is a gray, cheerless world for the tired, brave old soul who fails to get the care and waiting on and the affection she hungers for.

A big business man said recently: "I think the saddest sights in the world are the old people whose relatives regard them as burdens—especially when they realize the situation. I think it is fine to build churches and take care of babies and the growing boys and girls, but every dollar I can afford to give away goes to the old people. Sometimes I pay their rent and keep homes together, and sometimes I provide little comforts when their homes are broken up."

While charity takes care of the friendless and helpless, and science is finding out how to prevent physical aches and pains, it remains for "society"—and that means all of us added together—to prevent old age from suffering penniless dependence.

The United States and Canada pay bigger wages than other countries. Nearly all their workers earn enough to provide for old age. By planning ahead, they may have real comfort in their years of retirement.

Almost every man and woman must face these five great hazards of life:

Death—which may come early, before one's dependents have been provided for.

Accident—always sudden and often causing lessened earning power.

Sickness—which may cause want as well as suffering.

Unemployment—which may bring distress to others in addition to the unemployed.

Dependent Old Age—which must seek charity if self-support is no longer possible.

"Society", through organized effort, with its millions of mutual life insurance policies, has done what no individual could do alone. It has found a way to meet four of the five hazards.

Annuities for old age, protection in case of death, accident or sickness—almost every financial requirement can now be met by insurance. Only one problem is still unsolved—Employment Insurance—and that will follow.

Thousands of Metropolitan policyholders have asked how much of the family income should be expended for immediate necessities; how much for clothing; how much for food; how much for fuel; how much should be laid aside for protection. Our booklet, "Let Budget Help," answers these questions. A copy will be mailed free on request.

HALEY FISKE, *President.*

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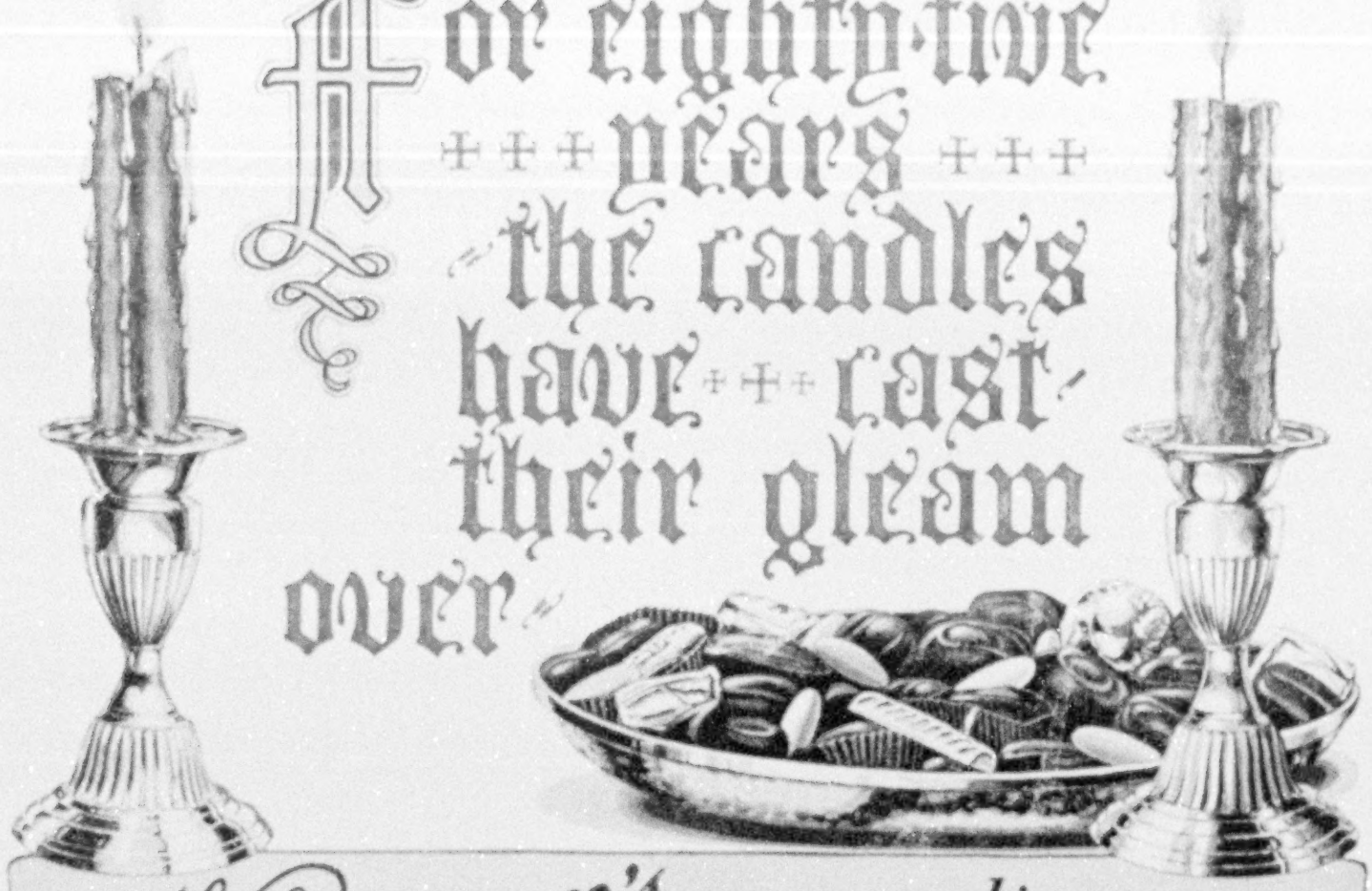
For eighty-five years the candles have cast their gleam over



Whitman's candies for Christmas

THE SAMPLER that seems to please every candy taste, dressed up for Christmas.

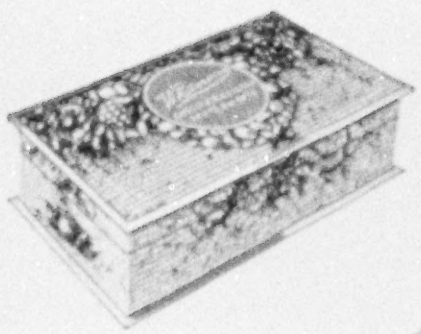
For gifts nothing can be more imbued with the spirit of Christmas than the SAMPLER in its gold and green and red holiday wrap. Other packages in Whitman's Quality Group, some of which are shown here, will fit every individual preference.

Hard candies, solid chocolate, Messenger Boys and other shapes provide sweets for the tree and the children.

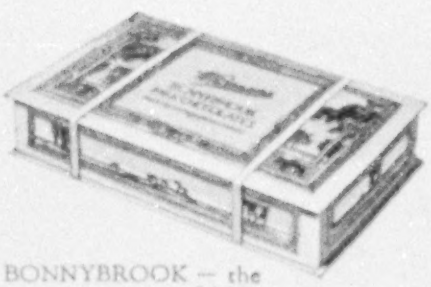
The great variety and sizes of Whitman's packages make selection easy and pleasant. For last-minute gifts, these are ideal, and all Whitman agents will mail them for you.

Whitman packages may be had in fancy outer containers, baskets, boxes and bags. See them at the nearby store that is agent for Whitman's. Ask the agent, or write to Stephen F. Whitman & Son, Inc., Philadelphia, for a folder of gift suggestions.

SALMAGUNDI — a favorite assortment in an artistic metal box.

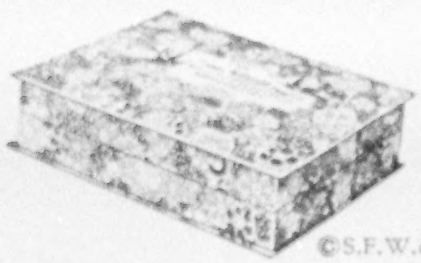


FRUITS AND NUTS for luxurious tastes.



BONNYBROOK — the new assortment of Milk Chocolates that has made millions of friends.

CLOISONNÉ — a gorgeous big box of selected chocolates.



PINK OF PERFECTION — the name expresses Whitman's opinion of these chocolates in a bright, colorful new package.

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VOL. LII, No. 6 WASHINGTON DECEMBER, 1927

THE NATIONAL GEOGRAPHIC MAGAZINE

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THE PAGEANT OF JERUSALEM

The Capital of the Land of Three Great Faiths Is Still the Holy City for Christian, Moslem, and Jew

BY MAJOR EDWARD KEITH-ROACH, O. B. E.

Deputy District Commissioner, Jerusalem Division

AUTHOR OF "ADVENTURES AMONG THE 'LOST TRIBES OF ISLAM' IN EASTERN DARFUR," IN THE NATIONAL GEOGRAPHIC MAGAZINE

With Illustrations from Photographs by Maynard Owen Williams, Staff Representative, National Geographic Magazine

NO CITY in the world has had so much written about it as the Holy City; none is more worthy of description. Fourteen times destroyed; each time has it raised its dignified head in triumph.

The capital of the Land of Three Faiths remains unique, maintaining its position not by towering skyscrapers, Byzantine art, or Roman architecture, but by sheer personality. Centuries of religious fervor, of pilgrimage, of historical event, of great actions, have given it distinction.

Almost as sacred in the eyes of the Moslems as are Mecca and Medina, Jerusalem is a place of pilgrimage for the Moslem world. For the Jewish people it is the City of Cities, toward which their thoughts ever turn. It is the first city Christians hear of at their mother's knee.

THE OLD JERUSALEM AND THE NEW

Jerusalem stands upon two hills, with a slope to the east, facing the sunrise and the desert.* Ravines have determined the limits of the city on the east, south, and west. Northward the country is more open and the ancient city tended to sprawl in this direction. To-day the old, gray-walled city of minarets, towers, and flat roofs dotted with domes is being encompassed by a New Jerusalem, a striking contrast of red roofs, but the valleys on its three sides still keep the modern encroachments at a respectful distance.

In Palestine all roads lead to the capital. The south road, from Beersheba, Hebron, and Bethlehem, joins the city at the Jaffa Gate. Toward the northwest corner of the city wall runs the road from the sea at Jaffa. At the Damascus Gate ends the great north highway, from Nablus, Nazareth, and Damascus. Toward the northeast corner, past the Garden of Gethsemane, the serpentine trail climbs the Judean Hills from Jericho and the Dead Sea, attaining a height of 2,600 feet above sea level, from 1,300 feet below, in about a score of miles.

* See, also, "Flying Over Egypt, Sinai, and Palestine: Looking Down Upon the Holy Land During an Air Journey of Two and a Half Hours from Cairo to Jerusalem," by Brigadier General P. R. C. Groves and Major J. R. McCrindle, in the NATIONAL GEOGRAPHIC MAGAZINE for September, 1926.

Photograph from Air Ministry, Great Britain

THE HOLY CITY, OLD AND NEW, FROM THE AIR

Among the points of interest whose location may be identified in this air view are the clearly outlined Temple area with the octagonal Dome of the Rock, D-E 6; Jaffa Gate, C 5-6; Damascus Gate, D 4-5; St. Stephen's Gate, E 5-6; Sultan's Pool, B 6-7; Citadel, C 6; Church of the Holy Sepulcher, C-D 5-6; Jews' Wailing Place, D-E 6-7; Mosque el-Aksa, D-E 6-7. The road to Bethlehem leaves the map near the lower left corner; the Jericho Road is near the lower right corner; the Nablus Road is near the upper right, and Jaffa Road near the upper left corner. The edge of the Garden of Gethsemane appears at E-6, beyond which rises the Mount of Olives.

On alighting from a train from Egypt, Jaffa, or Haifa, the first thing to arrest the attention is the name of the station, printed in the three official languages—English, Arabic, and Hebrew.

Next, choice must be made of transport, as horse-drawn gharries, saddled donkeys, or, at times, aristocratic camels vie with American automobiles for patronage.

BLUE BEADS AVERT THE EVIL EYE

Fear of the evil eye still has a part in Palestinian life. In order that the motor car and its chauffeur may be immune, many machines are provided with a string of blue beads, either around the steering wheel or on the top of the radiator, and every horse, camel, or donkey has a necklace of them to remind us that although drivers and mechanics are all very well in their way, the deities must be appeased.

Taking a car, we ride down the Bethlehem road toward the citadel. On the right, high above the Ophthalmic Hospital, flies the flag of the Venerable Order of the Hospital of St. John of Jerusalem. Eight hundred years ago noble knights and occasionally fair ladies set forth from England, France, Germany, Austria, and other parts of Europe to wrest the Holy Land from the Saracens, and under that flag the knights played a great part in the history of the city.

To-day the Grand Priory in the British Realm is living up both to traditions and mottoes of the Order: *Pro Fide* (For the Faith) and *Pro Utilitate Hominum* (For the Service of Man). It maintains the eye hospital, to which people come from all corners of Palestine, Transjordania, Syria, and even Iraq.

Here is our first glimpse of the walls. Apart from the one inclosing the Haram (the Temple area, containing the Dome of the Rock, see page 657), which is largely Herodian, they were rebuilt by Suleiman the Magnificent in 1542.

Down the road we go, past the Sultan's Pool, up to the Jaffa Gate, called by the Arabs "The Gate of the Friend," because it looks toward Hebron, the home of Abraham, "the friend of God." The citadel, a mighty fortress of five towers, looms high and imposing. The great blocks forming the foundations date from Roman times, but the building itself was probably constructed mainly in the fourteenth century. The street passes the citadel and, through a breach in the wall, enters the Old City.

The principal fruit market is at the base of the citadel, along the moat. Here are brought luscious oranges from Jaffa, grapes from Hebron, apricots from Bethlehem and Beit Jala, nectarines and peaches from near-by villages, bananas from Jericho, and enormous watermelons from the coast near Cæsarea.

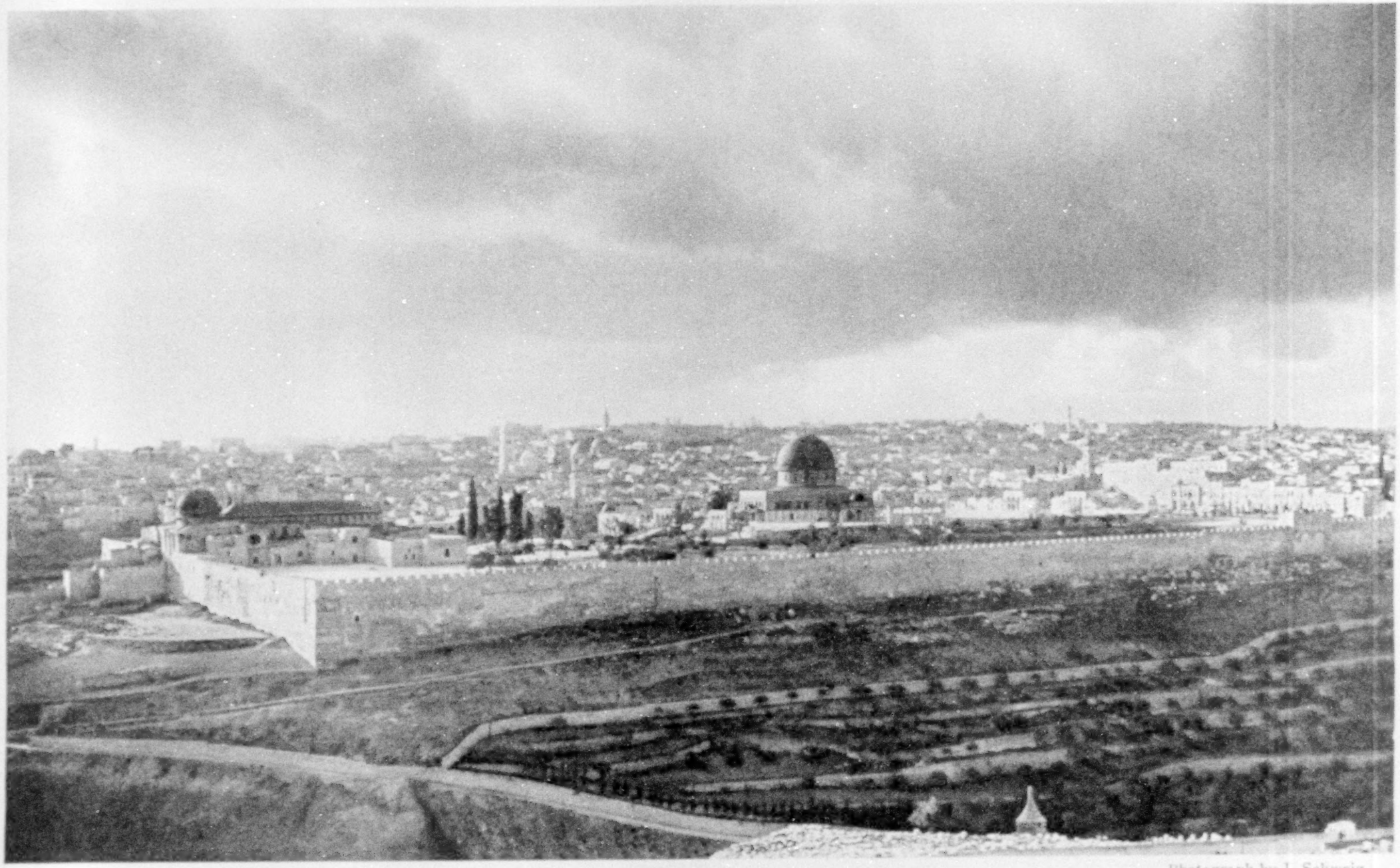
But Jerusalem's pride is its cauliflowers, which grow in the Valley of Silwan—"Siloam's shady rill." They would probably take a prize for size alone, but, unlike most big things, their flavor is delicious. There are few sights more picturesque than a woman walking with the grace of an empress, carrying to market on her head a dozen or more of these vegetables, which shade her like an enormous umbrella (see also page 641).

Among the women, who come in from the villages at sunrise with their produce, dark reds and blues are the favorite colors. A long, embroidered veil, generally white, streams backward from the bronzed face. In addition to the shallow basket of goods upon the head, many a woman has a baby upon her back.

After milk, eggs, and vegetables are sold, the women return to their villages to prepare the evening meal, but the men remain behind to pass the time of day. They adjourn to near-by stalls or restaurants and, after refreshing themselves with flat cakes of bread, eggs roasted in embers, or little bits of meat fried upon skewers, they purchase a cup of coffee and, sitting upon low stools, remain together until the cool of the evening. If sales have been good, many nowadays return home by car.

THE CITY OUTSIDE THE WALL

Instead of entering the Old City by the Jaffa Gate, which in Turkish times was closed at sunset, we turn north, to the shopping area. Beside the gate a nondescript collection of Jewish, Armenian, Moslem, and Christian Arab boys sit in an open-air shoe-shining parlor awaiting custom. Their little boxes are ornately decorated with brass plaques and paper



Photograph by J. Schweig

RELIGION, NOT COMMERCE, GIVES THE HOLY CITY ITS SKYLINE

Left to right: Dome of Ashkenazim Synagogue, Dome of Mosque el-Aksa, white tower of German Protestant Church, two domes of Church of Holy Sepulcher with tower of Franciscan Convent of Our Savior, two towers of Notre Dame de France, domes of Russian Cathedral, big, dark Dome of the Rock, distant dome of Abyssinian Church, campanile of Italian Hospital. The city wall, rebuilt by Suleiman the Magnificent in 1542, probably follows the line of those the Crusaders stormed in 1099, a line dating back to the days of Hadrian.

Photograph by American Colony Photographers

THE SCENE OF THE AGONY ON THE SLOPES OF OLIVET—THE MOUNT OF OLIVES

The Garden of Gethsemane is now divided into two areas, one with its Russian Church with domes like upturned beets, and one with its new Franciscan Basilica. Here Peter, James, and John fell asleep while their leader prayed, and Judas gave Jesus the kiss of betrayal.

Photograph by American Colony Photographers

AN AGE-OLD STOCK MARKET IN THE VALLEY OF HINNOM

This cattle and sheep market is held in what was once a great reservoir, the Sultan's Pool. Just to the left of David's Tower, in the citadel, is the Jaffa Gate of Jerusalem.

roses. The boy sits. The customer stands until one shoe is finished and is notified by a bell to advance his other foot (p. 647).

BEHIND THE HONK OF MOTORS IS THE SOUND OF CAMEL BELLS

The Palestinian traffic policeman has learned that in his particular job it is necessary for the left hand to know what the right hand is doing. His problems are not simple, as, in addition to a population that insists on walking in the middle of the road, he controls flocks of sheep and goats that travel at one mile an hour, laden camels at two and a half, local carts at four, and on up the scale to automobiles (see illustration, page 649).

Rushing motor cars and heavy, springless carts cannot altogether drown the sound of the bells. Western civilization, in the hands of the Palestinian chauffeur, marks its presence by the screech of electric horns, but through the din come the more pleasing notes of goat and camel bells.

Like the traffic, the shops are in a

Photograph by C. Raad

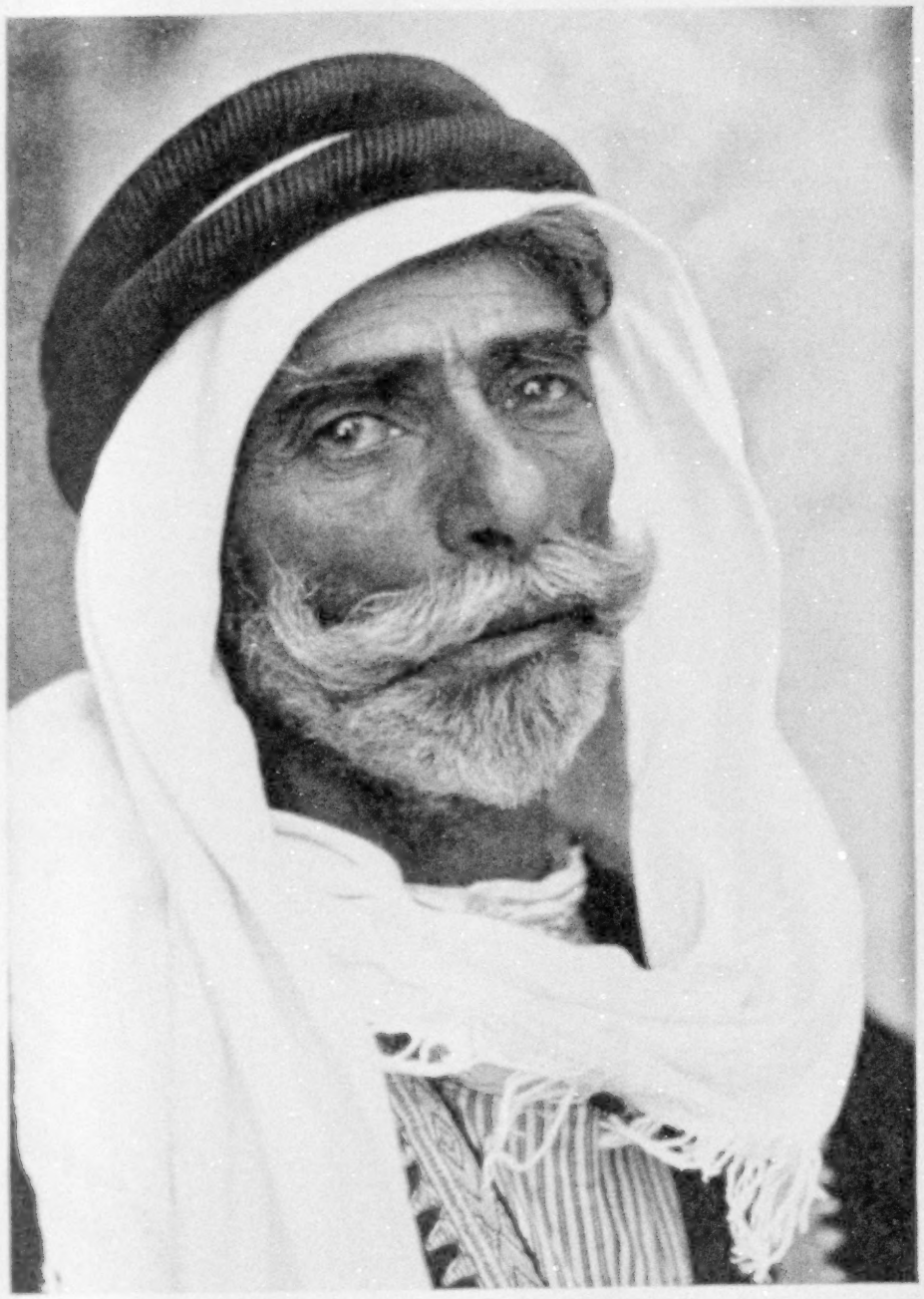
JERUSALEM'S CHOICEST VEGETABLE IS THE CAULIFLOWER

These peasant women, Moslem or Christian, wear the so-called Bethlehem costume—a tight jacket of velvet over a full-sleeved and heavily embroidered gown. The finest cauliflowers come from the Moslem village of Siloam, where ancient rock tombs serve as homes or stables (see text, page 637).

transitional state. It is curious to see a Bedouin from Beersheba or from east of the Jordan, in his sheepskin coat or camel's-hair cloak, standing at the window of a draper's shop, staring at a wax figure of a lady dressed in a French frock. Such contrasts between the old and the new are typical of Jerusalem, where eras jostle one another as races do.

However, even in the principal shopping street outside the western wall, the Occident is not allowed entirely to extinguish the ancient East. One day, while my son was having his hair cut, plaintive bleats greeted us from beneath the barber's chair. Inspection revealed a newborn kid.

The townsmen are more and more adopting the European style of clothing, but retain the red fez. Here we might think we were walking down a southern European street, until attention is arrested by a legless grand piano advancing jerkily toward us, as if propelled by an



THE MOSLEM CHIEF OF BETHANY, HOME OF MARY, MARTHA, AND LAZARUS

The Arab name for Bethany, so frequently visited by Jesus, is el-Azariyeh, derived from the name of Lazarus. It is completely Moslem and a small mosque is the landmark that guides Christian visitors to the tomb of Lazarus, whose final resting place is claimed by several lands.

A MOSLEM GIRL OF A GOOD FAMILY OF CHRISTIAN BETHLEHEM

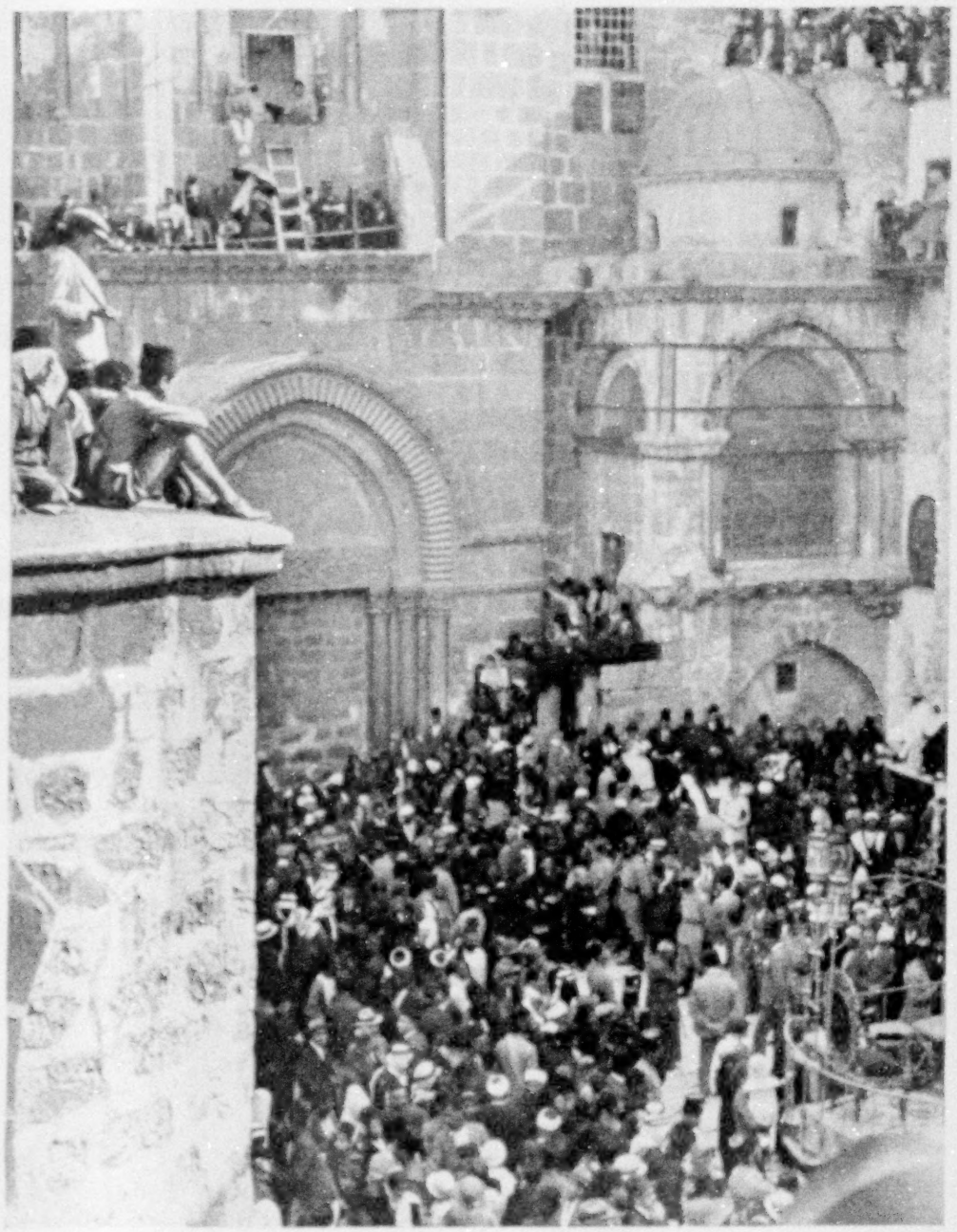
Such costumes make colorful the advent of the Nebi Musa procession. Prosperity, following the British occupation, has enabled the peasant women of Palestine to wear finer clothes, and a festival day in Jerusalem is more Biblical in appearance than it was under the Turks.

A CHRISTIAN GIRL OF JERUSALEM IN BETHLEHEM COSTUME

The coin-spangled, high tarboosh, which denotes the married woman, usually is hidden under the spotless veil.

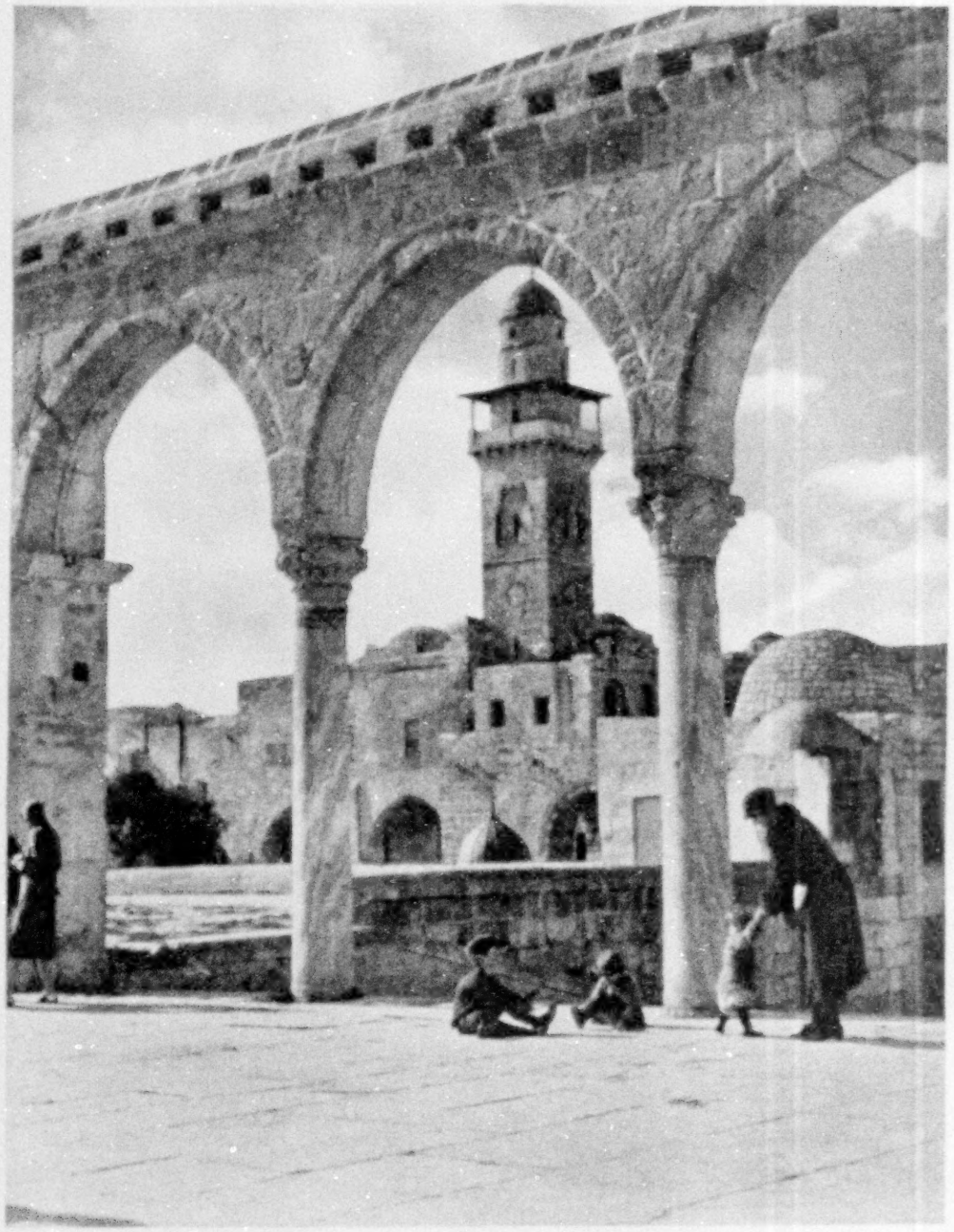
A PERSIAN JEW PORTER, ONE OF MANY JEWISH TYPES

The Jews of Jerusalem come from widely separated regions (see, also, text, page 667).



EVERY VANTAGE POINT IS OCCUPIED DURING THE WASHING OF FEET: CHURCH OF THE HOLY SEPULCHER

Holy Week in Jerusalem begins on Maundy Thursday, when the feet of brilliantly robed priests, who impersonate the disciples, are washed by their religious leaders.



WHERE MOSLEM SOULS WILL BE WEIGHED IN THE BALANCE: DOME OF THE ROCK

These arches which picturesquely frame the domes and minarets of Islam are called *mawazin*, or "scales," and it is here that Mohammedans believe the souls will be weighed on Judgment Day.

Photograph from Publishers' Photo Service

OVERLOOKING THE ROOFS OF THE HOLY CITY TOWARD THE MOUNT OF OLIVES

The Dome of the Rock stands near the center of the raised Temple area on Mount Moriah. One of the early inclosing walls is seen at the right, and it is at its foot, beyond the squalid Moghrebin quarter, that the Jews wail for the palace that lies desolate and the "walls that are overthrown" (see text, page 681, and illustration, page 670).

Photograph by American Colony Photographers

THE MODERN MAN'S FUEL GIVES A PRIMITIVE PORTER HIS BURDEN

Fifty empty gasoline tins are not heavy, but it takes careful arrangement and cautious going to avoid collision in crowded streets. Even then, a sudden gust may upset the whole load. After alteration, such tins supply varied needs (see text, page 651).

CAFÉ CUSTOMERS SMOKING THE ORIENTAL WATER PIPE

No form of intoxication appeals to the Moslem as does calm meditation.

A TOUCH OF ENGLAND IN A COSMOPOLITAN CAPITAL

Latin campaniles, bulbous Slavic domes, solid Teutonic architecture, and Gothic towers suggesting British cathedrals add variety to the Jerusalem picture. This tower belongs to the Cathedral of St. George's Close, here seen across a school playground.

WHERE THE CUSTOMER STANDS AND THE BOOTBLACK SITS

The customer stands until a stroke of a bell gives him the hint to lift his other foot.

Photograph by C. Raad

MOSLEM WOMEN WEARING FIGURED MUSLIN VEILS

A printed pattern so breaks up the lines of the face that a thin, and hence relatively cool, figured veil serves the purpose of a much thicker black one.

DAGHESTAN JEWS WEAR THE CAUCASIAN SILVER BELT

Both the green grocer and his patron are Jews from Derbent, on the Caspian Sea, but the quarter in which they live in Jerusalem takes its name from Bokhara.

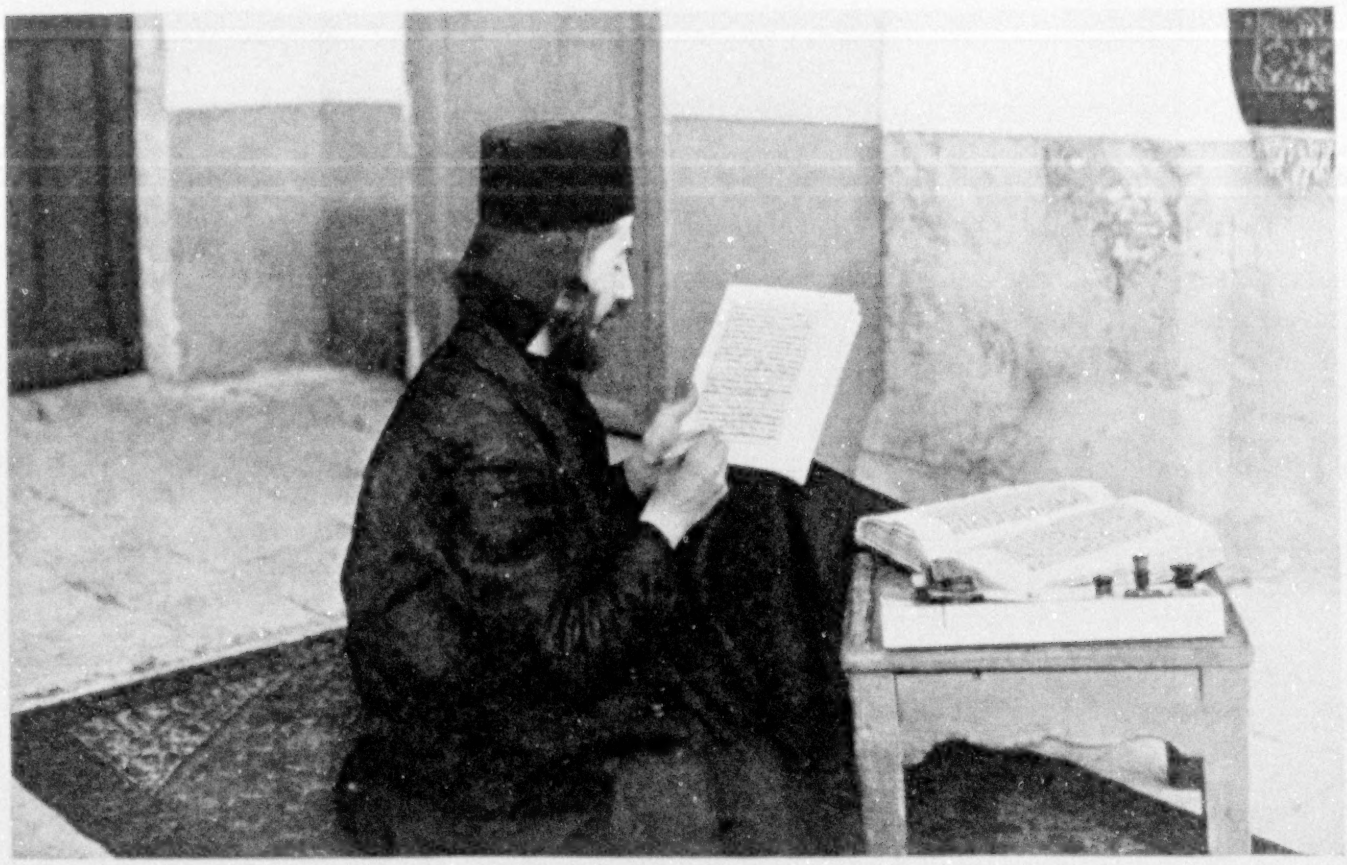
Photograph by C. Raad

THE "SMALL LOAVES" OF BIBLE TIMES PERSIST TO-DAY

The wafflelike Arab loaf is wallet, feast, and napkin. In it olives and cheese are carried. It is a spoon for dipping up gravy or curdled milk, and the last bite, before it is eaten, is often used to wipe off the mouth.

THE TRAFFIC POLICEMAN OUTSIDE THE JAFFA GATE

Common sense rather than mere regulations is needed for the complex task of directing the movements of animals, people, and machines in the throbbing life of Jerusalem (see text, page 640).

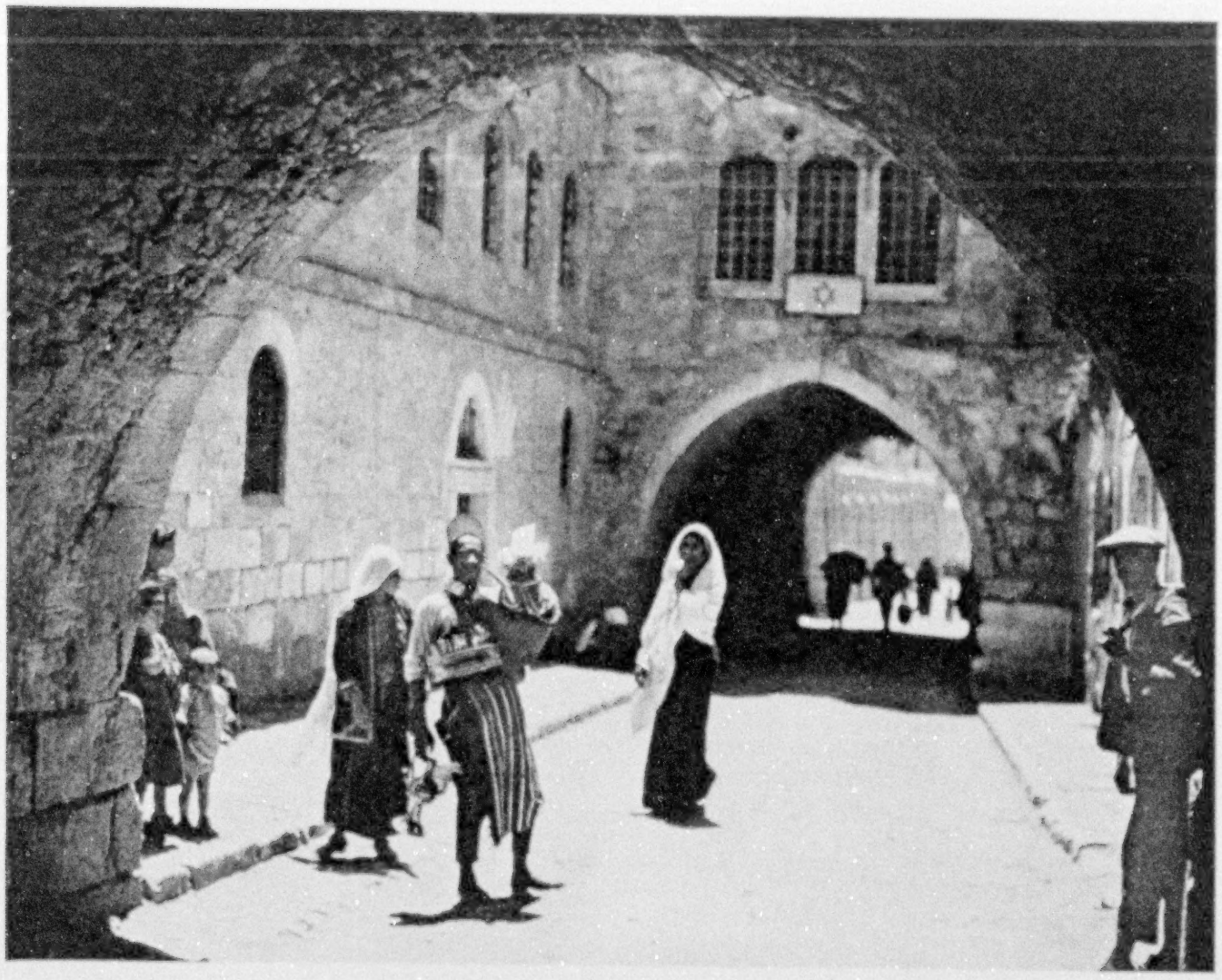


A TWENTIETH-CENTURY REMINDER OF THE MIDDLE AGES

Attached to the Syrian Jacobite, or Syriac, Patriarch, who now lives in Jerusalem, is this scribe, whose work rivals that of the Moslem calligraphers (see below).

PALESTINE'S OFFICIAL CALLIGRAPHER IN HIS GALLERY OF MOSLEM ART

Among the Moslems the best calligraphy commands prices for which very fair painters would gladly do a portrait or a landscape. Some of the samples here shown are old and valuable.



A PERIPATETIC LEMONADE-SELLER CRIES HIS WARES

Over the arch in the background is the sign of a Jewish charity organization.

unseen force. Closer investigation reveals that it is borne on the bent back of an Orfalian Jew or Moslem porter, partly on his shoulders and partly on a kind of padded saddle, and kept in place by a leather band fastened around the forehead. The strength of these men is extraordinary. It is not unusual to see a large crate or heavy piece of furniture so borne.

But for cleverness of maneuver one should study the man who balances on his back 50 empty 5-gallon gasoline tins bound together like a wall; no yachtsman has to show more skill, if the wind be high. Such tins supply varied needs, and after alteration become roofs, lanterns, milk cans, plant stands, fences, coffeepots, and dustpans (see page 646).

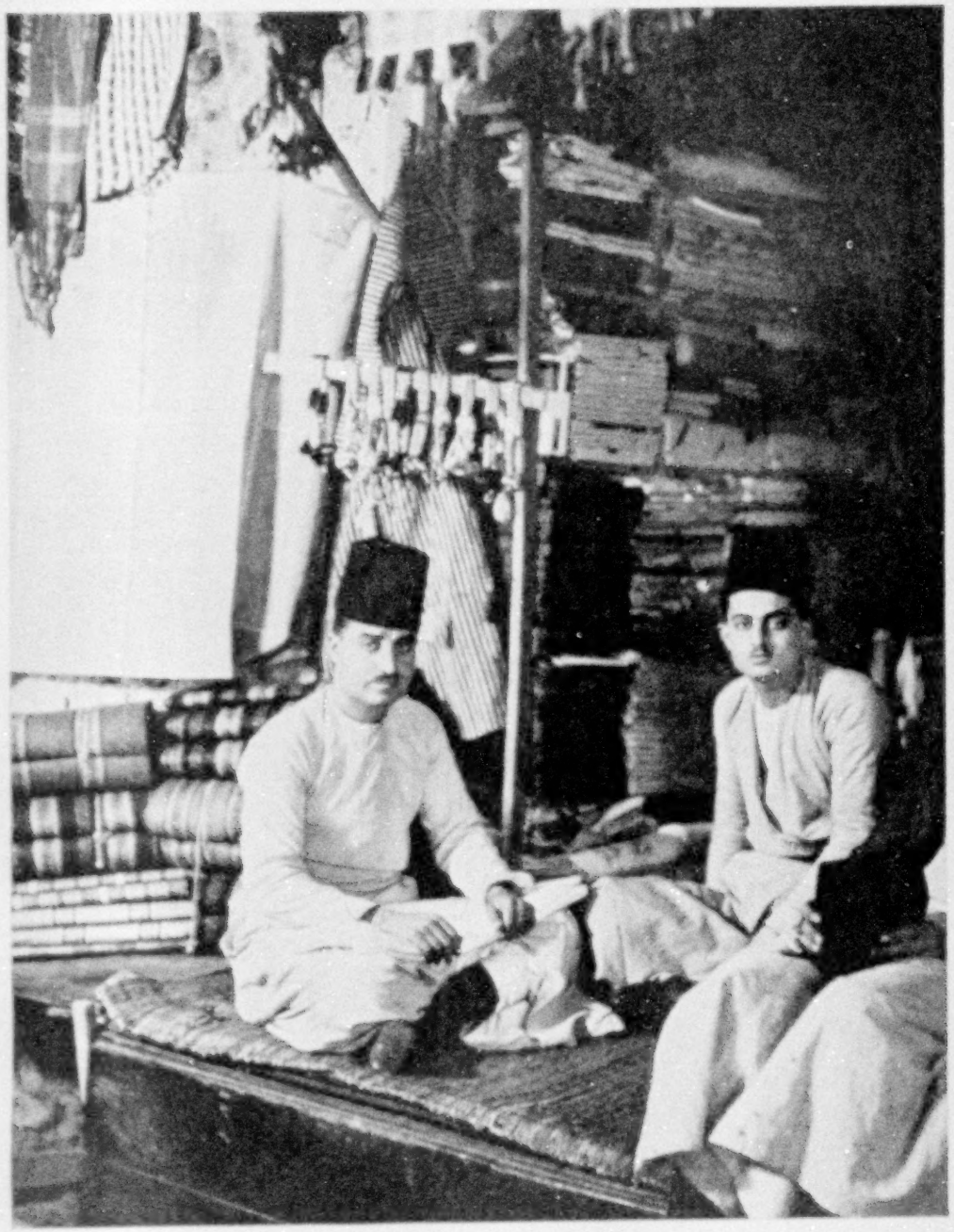
WALKERS AND HAWKERS OF COOLING DRINKS

Our soda fountains are peripatetic. The venders wend their way along the street, extolling the virtues of their soft drinks by clanking brass saucers. The lemonade is carried in a large glass or earthenware vessel adorned with brass, with a chunk of ice thrust into its mouth.

WHERE ONE'S WORD IS ONE'S BOND

For centuries the grain market for golden wheat and gray barley from the Plain of Sharon, the Jordan Valley, and the far-off hills of Transjordania has been at the Damascus Gate. Bargains are made by word of mouth, and few merchants break their bond. Were they to do so, public opinion would prevent them from continuing their business under the shadow of this beautiful gateway. For a time motor cars invaded this square. But the administration intervened and camels and donkeys loaded with grain sacks ousted the automobile.

No picture of modern or old Jerusalem is complete without reference to the shepherd. Most families do not keep large herds, but nearly every small house has a goat or a couple of sheep. A man or boy takes charge of the animals of a score



ONE CROWDED CUBBYHOLE IN JERUSALEM'S CITY-WIDE DEPARTMENT STORE

An oriental bazaar is a one-story department store extending over many blocks, with numerous owners. The city streets correspond to aisles, along which similar goods are offered by competing merchants. The shopper will find silks along one street, jewelry along another, and so on.

HIS EMINENCE ABRAHAM ISAAC KUK, CHIEF RABBI OF THE ASHKENAZIC COMMUNITY

The Ashkenazic, or German, Jews are from Russia, Poland, Rumania, and Germany and their language is Yiddish. Isaac Ben Solomon Luria, one of their early leaders, had as his morning prayer: "O God, grant that throughout this day I may be able to love my neighbor as myself."

A LEADER OF THE YEMENITE JEWS IN JERUSALEM'S BOKHARAN QUARTER

The Jews are a prominent class in the Moslem towns of Yemen, where they are noted as smiths and carpenters. In recent years many have come to Jerusalem, where they form a portion of the Jewish proletariat.

HIS EMINENCE JACOB MEIR, CHIEF RABBI OF THE SEPHARDIC COMMUNITY

The Sephardim, who came to Palestine when they were expelled from Spain by Isabella in the year that her protégé, Columbus, discovered America, still employ Spanish patois, though most of them speak Arabic.

A JEWISH HAVEN IN THE PROMISED LAND

These elders are sitting in the courtyard of an old folks' home near the Jaffa Road. Their fur-brimmed hats and bright robes add glints of light and color to this quiet retreat.

A BOKHARA MOSLEM MERCHANT NEAR THE HOLY SEPULCHER

Throughout the Near East, pilgrims from Yarkand, Samarkand, Bokhara, and Kashgar carry their grinding wheels for sharpening the knives which constitute the Oriental's tool kit. In a street near the Holy Sepulcher, they sell the woven caps men wear beneath their turbans and such bright trinkets and "nervous beads" as the Oriental loves.

A BIT OF BEAUTY PRESERVED AMID THE CHANGES OF THE EAST

Panniered donkeys plod along the covered streets; a wandering sherbet-seller clinks a brazen appeal to buy his ice-cooled drinks; a princely son of the desert stands as though undecided where to go, amid the maze of overarched highways; two townsmen talk of money in the shadowy bazaar, and a Crusader fountain displays time-softened carvings to the visitor.

of households, collecting a small sum from each owner. Daily he takes the sheep to pasture and brings them back at sunset.

It is no myth that sheep follow their shepherd in Palestine, and in summer evenings at sunset one sees, along the roads, small clouds of dust arising and hears the patter of little feet. Gradually the silhouette of the shepherd emerges, marching at the head of his flock, playing his David's pipe or carrying in his arms a newborn lamb.* Crowded as it is, Jerusalem finds room to harbor many sheep within its walls.

Jerusalem is now, as always, a city of many tongues. In the last census the following 29 linguistic groups were re-

* See, also, "Among the Bethlehem Shepherds: A Visit to the Valley Which David Probably Recalled When He Wrote the Twenty-third Psalm," by John D. Whiting, in the NATIONAL GEOGRAPHIC MAGAZINE for December, 1926.

Photograph by J. Schweig

WHEN INFREQUENT SNOW ACCENTUATES THE ARCHED ROOFS OF OLD JERUSALEM

Above the snowy rooftops rises the whitened Dome of the Rock which has long been erroneously called the Mosque of Omar.

corded, with the number of individuals in each:

Abyssinian	72	Magyar	55
Arabic	22,307	Maltese	4
Armenian	2,442	Persian	122
Bulgarian	29	Polish	10
Circassian	3	Pashto	4
Dutch	2	Rumanian	36
English	986	Russian	407
French	261	Serbian	13
German	281	Spanish	175
Georgian	4	Sudanese	35
Greek	760	Swedish	10
Gypsy	7	Syriac	38
Hebrew	32,341	Turkish	198
Indian dialects	769	Yiddish	999
Italian	209		

WE ENTER THE WALLED CITY

Having made our tour of modern Jerusalem, let us enter the Walled City by the Jaffa Gate and make our way down David Street on foot.

In few streets of the Old City are carts or motor cars allowed. So narrow are the covered ways that it would be impossible for such vehicles to pass, even were it not for the steps by which the city streets climb steep hills, once steeper than they are to-day. As in the Psalmist's time, Jerusalem is "builded as a city that is compact together." In times of festival, when the streets are congested with traffic, the sight-seers, chiefly women and children, throng the flat roofs.

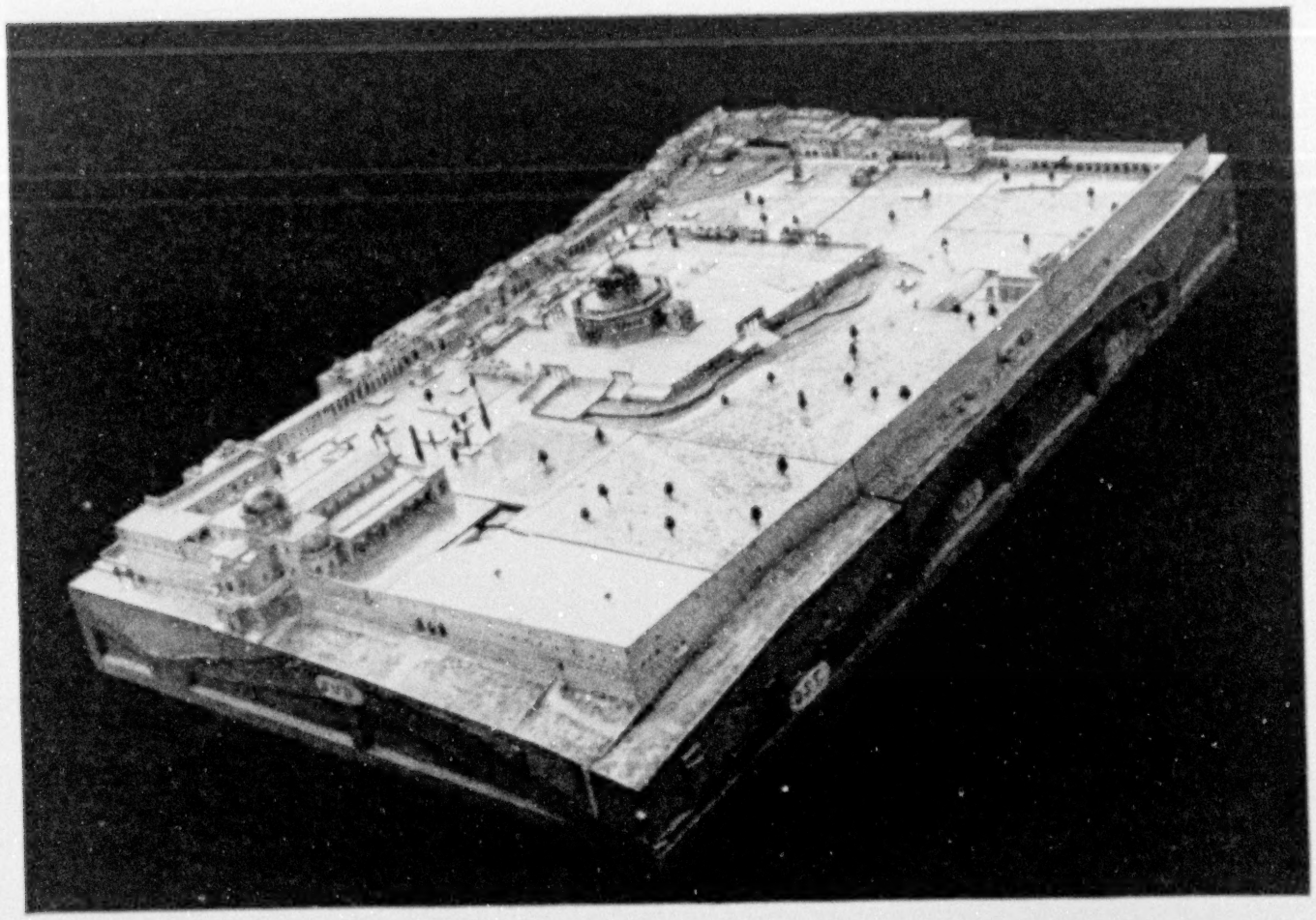
Some of these buildings were destroyed or badly cracked in the recent earthquake, but, considering the intensity of the shock in other parts of Palestine, the Holy City escaped lightly.

David Street is a series of long, shallow, greasy, cobblestone steps, and a good stick with a sharp point is not to be despised. Walking is difficult, as one constantly skirts every sort of bundle borne on men's shoulders or donkeys' backs. The world is busy bargaining amid the traffic, so it is best to take time and drift along slowly with the crowd.

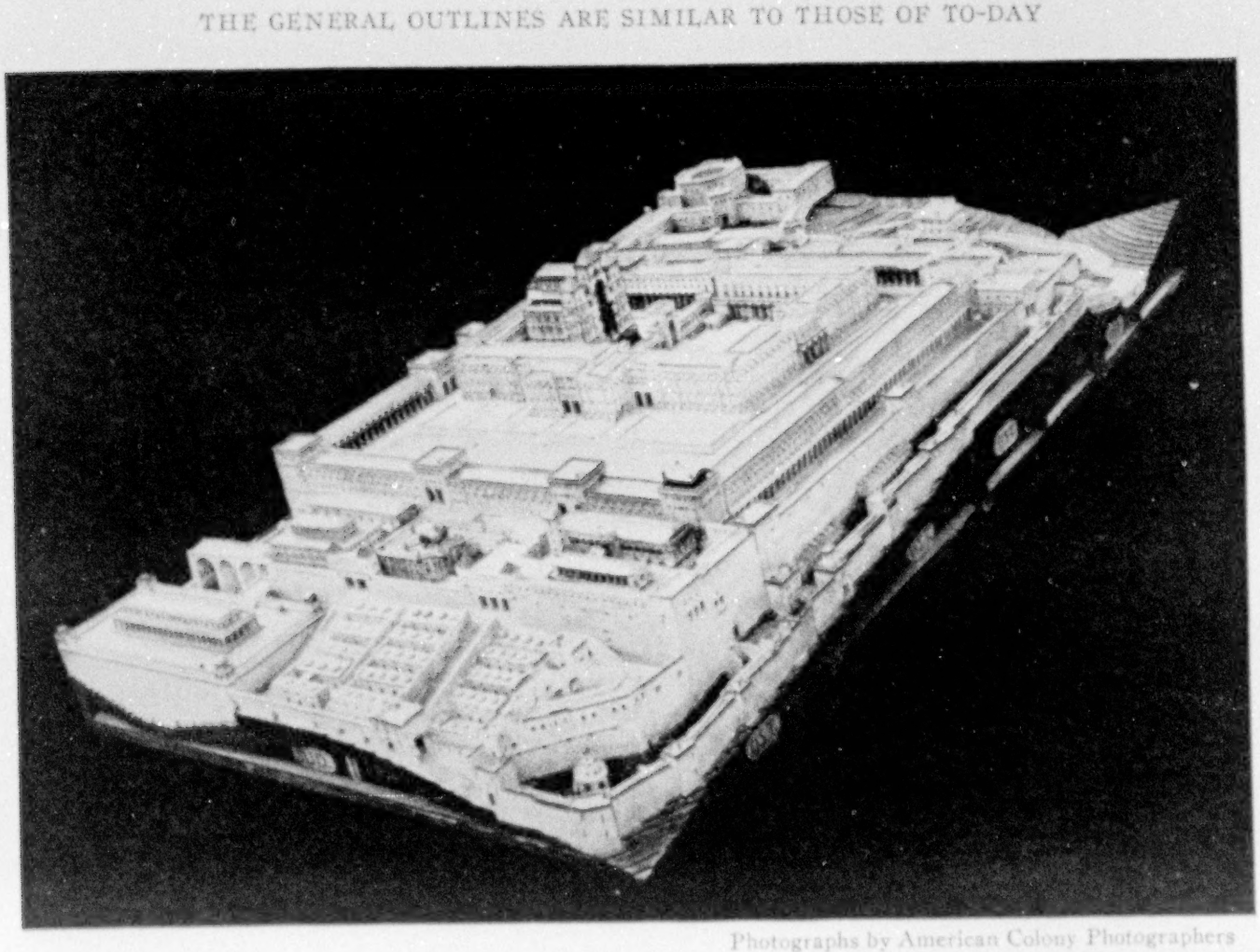
NO DAY OF REST IN THE HOLY CITY

A remarkable feature of the Holy City is that, although each of the three communities has its own weekly day of rest, the city itself never has one, and every day some shops are open.

Donkeys bearing heavy burdens pass by, pushed and prodded by their drivers,



A MODEL OF THE TEMPLE AREA AT THE TIME OF JUSTINIAN'S CHURCH, A. D. 530; THE GENERAL OUTLINES ARE SIMILAR TO THOSE OF TO-DAY



Photographs by American Colony Photographers

RECONSTRUCTION OF THE TEMPLE AREA AS IT WAS IN SOLOMON'S DAY, B. C. 1000

One of the Schick models which show the various temples that have occupied the site on which the Dome of the Rock now stands. The area has been a Jebusite threshing floor, the site of the Tabernacle, and of Solomon's, Zerubbabel's, and Hadrian's temples, Justinian's church (see above), and the still existing Dome of the Rock (see text, page 670).

A PENTECOSTAL PARADE THROUGH THE DAMASCUS GATE

The Feast of Weeks brings many Jews to the Wailing Place and the Tomb of David on Mount Zion. Some of them are here seen at the inner entrance of the Damascus Gate.

or ridden by little boys who call out ceaselessly, "Oh-ah, oh-ah!" These children perch upon a saddle on either side of which are fastened old gasoline boxes containing all sorts and conditions of cans made from the ever-present petroleum tins.

Moslem ladies wear two outer garments fastened at the waist by drawstrings; one covers the skirt and the other the shoulders and head.

A *mandeel*, which comes over the forehead and hangs to the chest, completely hides the face. This veil or handkerchief is sometimes black, sometimes white, and occasionally figured muslin. Even to one who has been long in the city, it gives a weird effect, especially when you meet women clothed in the usual black with a brilliant piece of figured muslin where their faces should be; or toward nightfall, when, turning a corner, you narrowly miss a ghostly figure in white, her features lost behind a black veil.

The poorer Jewish women wear a handkerchief fringed with lace over the head, and many ornaments of oriental design.

Hungarian Jews shuffle down the steps in long coats of velvet and fur-trimmed caps. Long curls hang on either side of the face in obedience to the Law: "Thou shalt not mar the corners of thy beard."

A Bokharan Jew in a silk robe of many colors strolls by.

From time to time we pass a Bedouin who always bears himself with an air of distinction, however tattered his garment. Arab dress, however old, torn, or dirty, has peculiar charm and dignity. He passes with the easy stride of one accustomed to vast deserts, and his head is well set upon his shoulders.

His women are easily distinguished by thick plaits of hair, generally black, but sometimes dyed with henna. Unlike their Moslem sisters of the town, they are allowed to show their faces, often elaborately tattooed. Their long, blue, attractively embroidered gowns, with sleeves falling to the feet, are hitched up at the waist for ease in walking.

The village women always cover their hair. Sometimes, under their veils, they wear a close-fitting cap surmounted by coins and other ornaments, which weigh eight or nine pounds.

In the back of the market and along Christian Street are the drapers' shops. In this corner many specimens of beautiful hammered brass and copper are sold. Olive-wood workers are also seen carving or polishing material centuries old.

THE SHOPPING CENTERS OF A RELIGIOUS CITY

Our shopkeepers do not specialize, but are strong believers in variety. You can generally find what you want in the Old City if you dig for it. In a shop measuring 9 by 12 feet, my wife rescued some sardines from a counter cluttered with soap, shoelaces, biscuits and writing paper. Tucked away on a high shelf were three hats of the latest French model.

Many little shops sell vegetables, together with lemonade, spices, raisins, and shelled walnuts. Their façades are decorated with round wooden boxes roughly painted in crude designs of green, gold, and blue, containing Turkish delight from Damascus. In the corner of a window a baby's feeding bottle huddles with a basket of onions, a football, a primus stove, a few lemons, thermos flasks, and a sleeping cat, the whole flanked by beautiful handiwork from the villages.

Meat appears stricken with blemishes which prove to be the purple stamp of the veterinary officer responsible for passing it as fit for food. That exposed in the Jewish shops is further adorned with Hebrew hieroglyphics showing that the slaughtering has been carried out according to the Jewish ritual and examination and has been duly passed as kosher by the rabbinical authority.

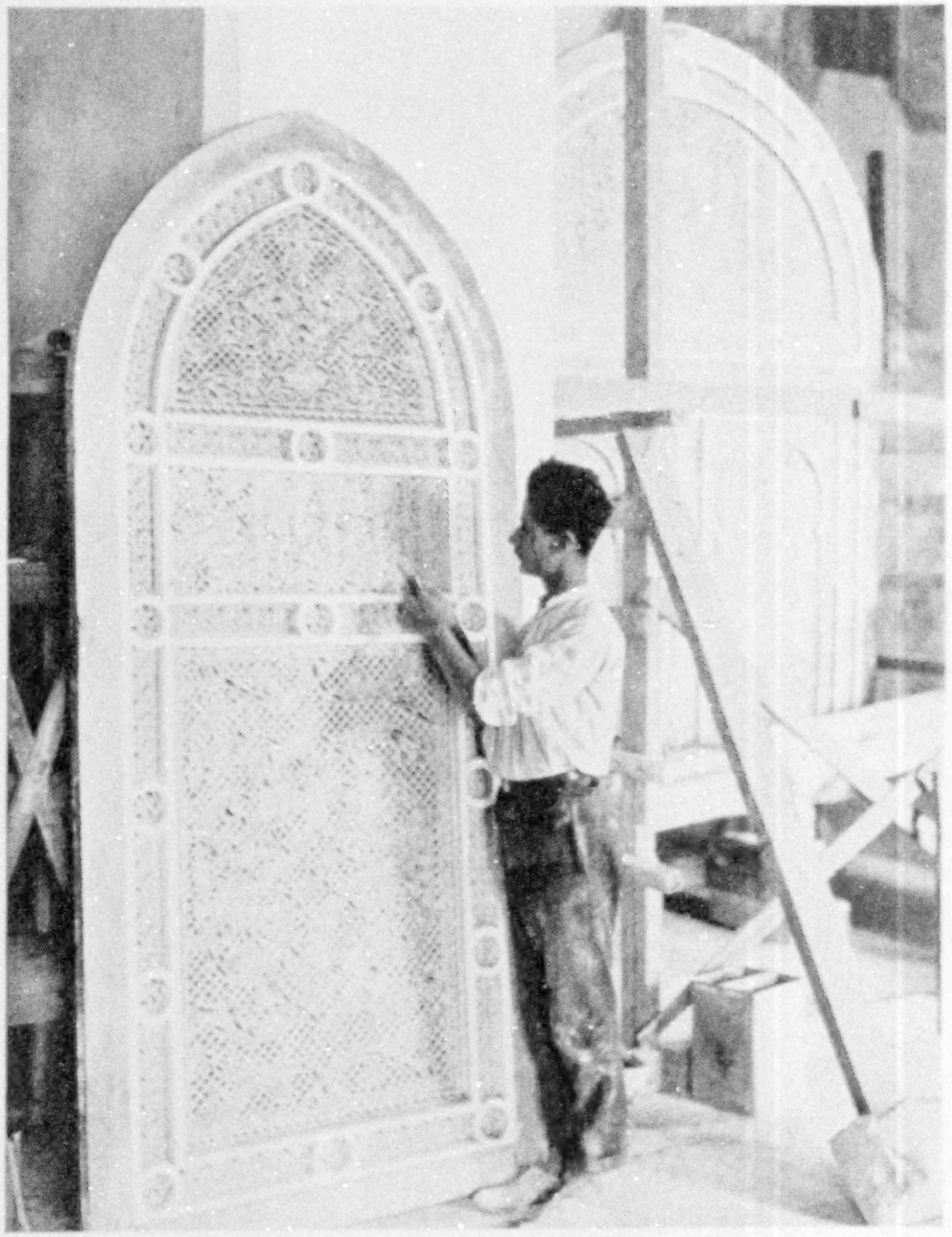
The principal retail vegetable market is housed in a vaulted edifice dating from the Crusades. It is situated in the Muristan, the ancient home of the Knights of St. John, and probably constructed by them. This building was formerly the stable of a khan, as in the walls one can still see where the stone has been cut to form rings to which the animals were tied. The arches of the sharply vaulted roof come down nearly to the ground and are supported by masonry two yards thick.

The country women, in their picturesque costumes, sit upon the floor amid piles of vegetables. The varied greens of cabbage, lettuce, beans, peas, artichokes,

Photograph by American Colony Photographers

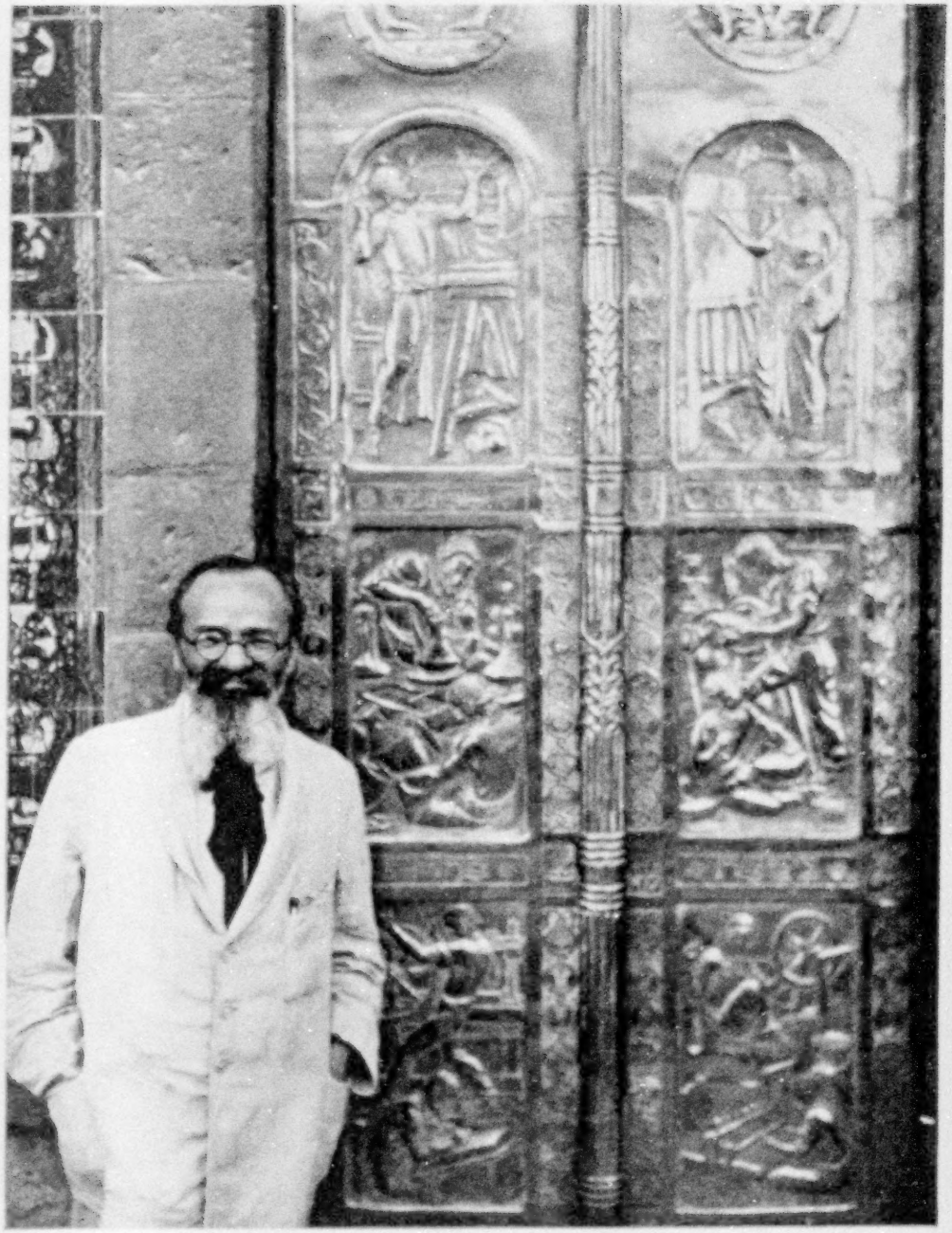
THE YEMENITE JEW WEARS TARBOOSH AND SIDE CURLS

For centuries the Yemenite Jews have lived amid the Sunni and Zeidi Moslems, in the "Land of the Right Hand," as Yemen is called to distinguish it from Syria, "The Left-Hand Land." Though fairly well treated in their native land, many of them have emigrated to Palestine. From the time of Mohammed until recently, the Yemenite Jews were entirely isolated from their brothers in other parts of the world (p. 663).



TRAINING RAINBOW COLORS TO GEOMETRIC DESIGN

No feature of the Dome of the Rock or of the Mosque el-Aksa is more striking than the deeply colored windows, their intricate designs patterned in plaster. Here a workman is finishing a window frame into which the polychrome glass has been set. To the right is another pattern. Extensive restoration work is now in progress. Comparatively few workmen are skilled in these pleasing designs.



A JEWISH ART LEADER AND SOME OF HIS WORK

Prof. Boris Shatz stands beside the entrance to the Bezalel School of Arts and Crafts, where many forms of Jewish art are being developed. Metal work, painting, and ceramics are the main branches.

A JEWISH PORTER FROM KURDISTAN

In Palestine the Jews are not all engaged in trade. Some of the recent immigrants are farmers. Builders and artisans are numerous, and many of the porters of the Holy City are Jews from Yemen or Kurdistan.

HIS EMINENCE HAJ AMIN AL-HUSSEINI, PRESIDENT OF THE SUPREME MOSLEM COUNCIL, AT HIS DESK

All Moslem religious endowments in Palestine are administered by the Council of which His Eminence the Grand Mufti, here seen in his office, is permanent head. Four other members, elected for four years, represent the districts of Jerusalem, Nablus, and Acre.

parsley and vine leaves naturally predominate, but there are also glimpses of purple eggplant, white marrow, yellow apricots, dark beetroot, and primrose-colored lemons. Little porters with baskets on their backs dodge about, looking wistfully for custom. There is a pleasant hum of conversation as buyer and seller wrangle quietly over the last millième.

THE BRAZEN CHALLENGE OF THE COFFEE SELLER

A coffee seller plies his trade, holding in his right hand two little brass pots, one filled with strong, dark and bitter liquid. A cup of it sells for from one to five cents, according to the social status of the customer. He clangs a couple of cups together in his left hand and with a quick turn of the wrist dextrously washes them out with water from the second pot.

Excepting David and Christian Streets, nearly all the shops line narrow lanes, arched over with thick masonry, the light entering in sharp slants from holes cut in the roof.

Money changers hire a corner in the doorway of a shop. Under the shelter of their patron they set before their counters tiny glass-topped boxes, in which the moneys of many lands are displayed as attractively as the goods of the shop itself.

From a sweet shop hangs a large, blue glass bowl, which serves the double purpose of attracting customers and deflecting the evil eye from proprietor and merchandise.

The egg market has a by-alley to itself, one of deep shadows and patches of sunlight that suggest the charm of the Arabian Nights. In cool, deep arches hung about with cobwebs, blackened with the smoke of countless fires, turkeys and rabbits disport themselves, awaiting their fate.

VALET TO SHEIK AND SHOPKEEPER: THE TARBOOSH PRESSER

The presser of tarbooshes, red felt fezzes lined with plaited straw, is a specialist. The door of his yard-wide shop is taken down and in the entrance is the charcoal stove with four openings on its

flat top, over each of which is placed a hollow form tapering toward the top, like a tarboosh of brass.

The young gallant, who regards his fez as the most important item in his dress, brings his headgear in weekly. It is carefully brushed by the artist, and sprinkled with a little water, often by the mouth. It is then placed on the top of the form. A larger cover, made of brass, is put over it and squeezed tight by a press attached to the side of the stove. After a few minutes it is taken off steaming hot, fresh with renewed life. For this humble but essential valet service the expert receives one piaster, about five cents.

In another shop a man is making eiderdowns of cotton and scarlet cloth. They differ from the European variety in the fact that sheep's wool or cotton takes the place of eider down.

Near by is the vender of clay vessels, every shape and kind of which may be bought cheaply, from tiny lamps to big jars holding many gallons. One for use as a money box has a slit in the side and makes a good bank, as it must be smashed before the proud possessor can get at the cash.

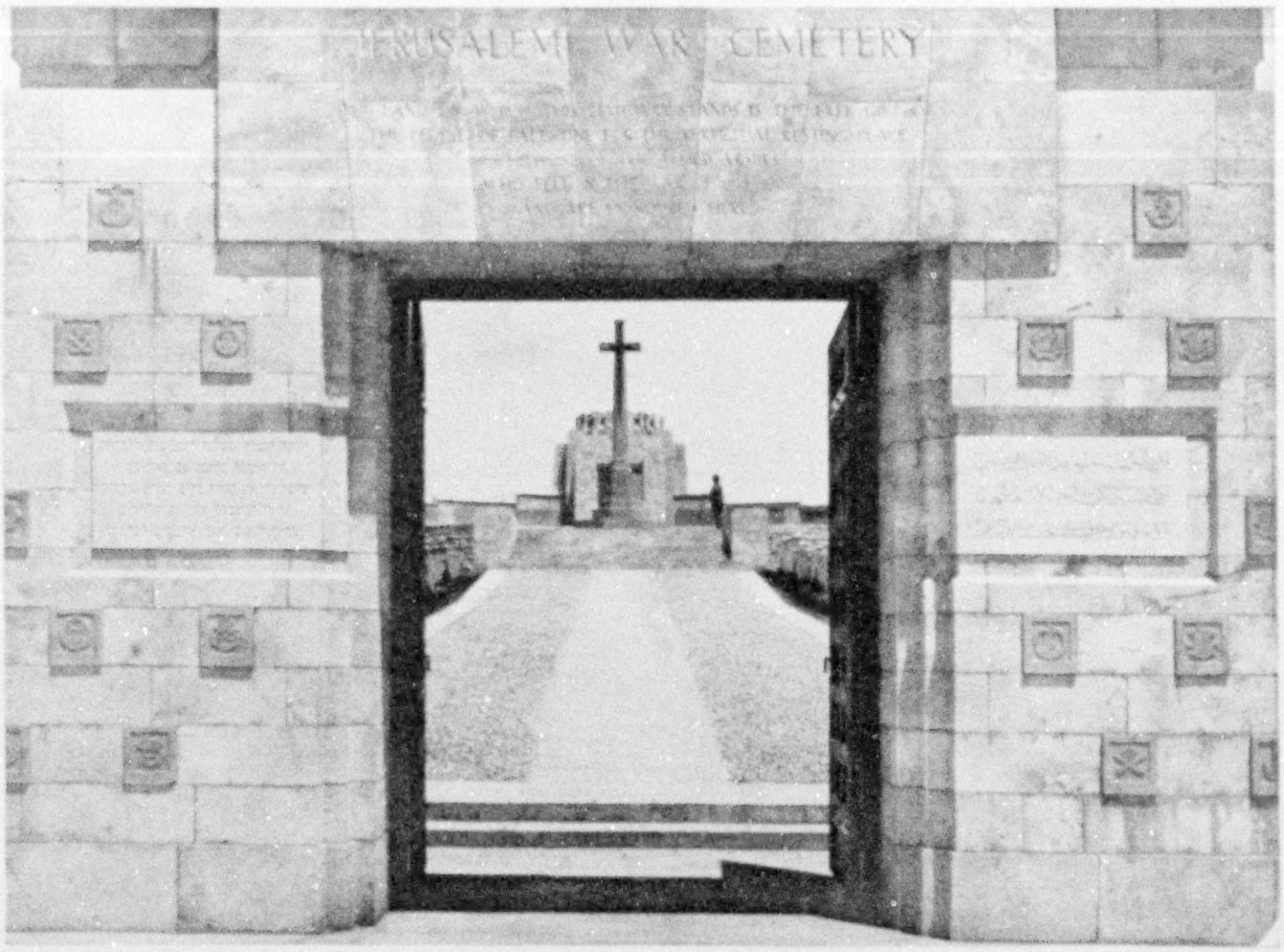
A PRAYER-COMPASS IN THE MOSQUE EL-AKSA

Extensive restoration work is now in progress in the Mosque el-Aksa and the main aisle is closed. This mihrab, or prayer niche, pointing toward Mecca, is in what is known as the place where Zacharias was slain "between the temple and the altar."

THE SILVERSMITHS OF JERUSALEM ARE EMIGRANTS FROM ARABIA

The silversmiths and filigree workers are mostly Yemenite Jews, a people who through the centuries have lived in Arabia, surrounded by the most orthodox Moslem tribes. From time to time they have drifted across the barren steppes of Arabia, down the mountain side, and across the Jordan and settled in Jerusalem. Their art is not very advanced, but they form a pleasant section of the bazaar alongside the Damascus silk merchants, where one can buy a beautiful silken robe dyed in every color imaginable and heavily embroidered in silver and gold.

Calligraphy holds an honored place in the East. A high price is paid for well-cut brass seals, which are in great demand by many country people of the older generation who can neither read nor write. The seals are knotted to a handkerchief and so secured to some inner garment.



Photograph by American Colony Photographers

THE TRILINGUAL GATEWAY TO THE JERUSALEM WAR CEMETERY

On the cross which rises among the graves of the twentieth-century Crusaders who fought for Jerusalem, there is a double-handed sword, such as Richard and Baldwin wielded. On the wall are the regimental crests of those who took part in the capture of the Holy City. The inscription is in English (above the gateway), Arabic (tablet at the right), and Hebrew (tablet at the left).

There are numerous restaurants where every conceivable kind of spiced delicacy and minced meat may be purchased, rolled in pancakes. The sweet-meat shops do a large trade in cakes, called *baklawis*, cut diamondwise and baked on massive tinned copper trays. The flaky pastry is merely a frail excuse to hold together the heavy syrup, rich spices, pounded nut meats or fig paste. Pink sweets on the end of sticks add a picturesque touch.

ANTIQUE OIL PRESSES IN DARK, ARCHED ROOMS

In spite of the march of events, Jerusalem works its oil presses as Abraham did his. Under vaulted arches in the rear of obscure shops, one hears the sound of stone grinding against stone, and, peeping in, dimly perceives a blindfolded camel or mule patiently going round and round, grinding sesame seed (see page 666).

The time for working the press is from midnight to noon. Two animals are used, each working in stretches of one and a half hours. They sleep beside the press and may not leave the place for months. The workers put in a 12-hour day, and after working seven days a week for months on end, generally take some weeks off to recuperate.

The greatest splash of color is found in the camel-outfitting arcade, whose goods find their way here from Damascus. Every hue adorns the shops, which face one another so closely that there is hardly room for two people to pass. Yellow boots with blue tassels hang beside blue beads strung on coils of hair, dyed purple or red. Red slippers are flanked by calf-skin-covered mouthpieces for hubble-bubble water pipes.

Though there is no need to buy a pipe, as one can be rented for an indefinite period at any coffee shop for five cents, fastidious smokers carry their own mouth-

pieces of jade, amber, or ivory, tastefully carved or decorated with silver filigree.

A VARIETY OF ODORS

Unlike many corners of this crowded city, there is an alluring smell here. Oriental drugs and spices are kept in boxes surrounded by decorated leather water bottles and camel trappings fit for a bridal caravan, made of goat's-hair dyed in crude yellow, pink, dark blue, light blue, and scarlet. On them are mounted glass rings from Hebron and shells from Aleppo.

Charms to save children from the evil-eye, made of a three-cornered piece of alum, one blue bead, and a wooden bean, are strung up with wooden clogs inlaid with mother-of-pearl, holsters, and every kind and shape of brass bell for camel, sheep, donkey, or goat.

The porters have their own coffee shop, a magnificent building dating from Saracenic times. It is erected in the form of a Maltese cross, in the center of which is a high, raised dome supported by pillars. Here the porters, sitting on little stools, spread across their knees a wooden tray supporting a frugal meal of bread rings and eggs. Sunlight smuggles itself into the shop through a heavily barred window built between the top of the pillars and the dome.

Permeating these tortuous roads, the smells of coffee, spices, and curry mix with others less agreeable, and nothing suggests the Orient so vividly as the variety of its odors.

Photograph by American Colony Photographers

THE TOMBSTONE OF PHILIP D'AUBIGNY, MEDIEVAL CRUSADING KNIGHT

Near the entrance of the Church of the Holy Sepulcher is this tombstone of one who tutored Henry the Third of England. After 689 years of wear and tear, it was moved out of the main path of pilgrims and protected by a grating (see, also, text, page 667).

Jerusalem's position on the rocky summits of the Judean highlands has always made the water supply a problem. It has but a single spring in the valley of the Kidron, from which water flows intermittently.

AGE-OLD RESERVOIRS SUPPLY JERUSALEM WITH WATER

To one seeing the city now, it is difficult to conceive the conditions that existed before the British entered. Privately owned cisterns, rain-fed during the winter months, furnished the main water

Photograph by C. Raad

WHERE A CAMEL PLAYS BLIND SAMSON TO GRIND SESAME SEED

In dark, arched rooms far from the open life of the bazaar, camels turn heavy millstones. The eyes are covered to keep the beast from becoming dizzy, or from discovering how little he is getting on in life (see text, page 664).

supply. The army increased it by utilizing an ancient Herodian reservoir south of Bethlehem and replacing the old stone aqueduct to the city with modern piping.* Lately, as this supply was insufficient, three large stone tanks nearer Bethlehem, with a capacity of 40,000,000 gallons, have been restored by the municipality.

History is almost silent concerning the origin of these pools. They are said to have originated in the time of King Solomon, whose name they bear, and, according to Josephus, it may have been Pontius Pilate who rebuilt and enlarged them.

Water is collected from springs and the whole system, formerly worked by gravity, now has a modern pumping plant which was transferred from Romane, in the Sinai Peninsula, where it had been installed by the British Army to conduct Nile water across the desert into Palestine during their advance. During 1926 the pools were practically empty, owing to a long drought, but the following year, after a 5-day rainfall, within three weeks, they were full for the first time since the days of the Romans.

The last water reserve is pumped up from Ain Farah, the rock-rimmed oasis which David probably had in mind when he composed the Shepherd Psalm (see, also, footnote, page 655).

People who live in well-watered towns can hardly believe the straits the city was in. Even to-day it is not unusual to see men and women lined up waiting for their turn at the standpipe. Much of the picturesqueness has gone, as gasoline tins have largely replaced the earthenware jar, but bloated waterskins are still carried through the narrow streets, somewhat to the danger of the passer-by.

TOMBS OF MEDIEVAL AND MODERN KNIGHTS

In the courtyard near the entrance to the Church of the Holy Sepulcher lies the tomb of Philip d'Aubigny, a medieval crusading knight. From the tomb which recalls the early Crusades so vividly it is a few minutes to the burial place on Mount Scopus of more than 3,000 modern crusaders, who, at the call of country, crossed the seas and the burning sands of Sinai to mount the rocky hills of Judea. They were armed not with cloak, buckler, shield, or spear, but with trench mortar, howitzer, machine gun, and bayonet. They dared all, gave all, even life itself, and what finer resting place could be won than the soil of the Holy City? (page 664).

THE PAGEANTRY OF RELIGIOUS FESTIVALS

In the little city of great things, religious observances play a part in daily life unknown in other capitals. Since it is the center of three great faiths and all their subdivisions, can it be wondered at if each faith and branch thereof jealously guards rights and rites acquired throughout centuries, often through famine, siege, and untold hardship?

In a modern city, one meets people daily for years without knowing their religious beliefs. This is impossible in Jerusalem. Be he occidental or oriental, every man's religion is known to all and also the fidelity with which he carries out the obligations imposed by his faith.

The religious festivals bring their own pageantry to the city. There are Moslems with their adherents from northern Africa, India, Afghanistan, Bokhara, Arabia, and the Sudan; Christians of all denominations; Latins, including many of the religious orders and the Uniate churches which acknowledge the supremacy of the Pope; the Eastern churches, which comprise the Orthodox, the Armenian, and Syriac, Copts, and Abyssinians; the Anglican Church; the Jews, divided into Ashkenazim, Sephardim, Karaites, Yemenites, Georgians, and Bokharans.

During the year they all have ample opportunity to display their beautiful robes and vestments, from a simple black gown worn by Moslems to cloth of real gold heavily embroidered, from a white turban to a scarlet miter incrusted with precious stones (see Color Plates of individual ecclesiastical vestments, I to VIII). Magnificent, spectacular, and stately are the processions.

THE NEBI MUSA PROCESSION

The annual Moslem pilgrimage to Nebi Musa, the reputed burial place of the Prophet Moses in the Jordan Valley, be-

* See, also, "An Old Jewel in the Proper Setting: An Eye-Witness's Account of the Reconquest of the Holy Land by Twentieth Century Crusaders," by Charles W. Whitehair, in the NATIONAL GEOGRAPHIC MAGAZINE for October, 1918.

YOUNG JEWISH ART STUDENTS AT WORK

ARMENIAN CERAMISTS ARE REVIVING AN ALMOST FORGOTTEN ART

In the days of Suleiman the Magnificent, Jerusalem faïence work was added to the Dome of the Rock. Recently the original kilns were discovered and potters are being encouraged by the Pro-Jerusalem Society to replace missing or damaged tiles and to revive the entire ceramic industry.

Photograph by Publishers' Photo Service

DRAWING WATER FROM THE ROCK RESERVOIR UNDER THE TEMPLE AREA

Between the Dome of the Rock and the Mosque el-Aksa is a vast hidden reservoir fed from the Pools of Solomon, south of Bethlehem. From it water-carriers, using goatskins as containers, bear water to many parts of the Holy City (see, also, text, page 665).

gins by a ceremony of imposing simplicity, known as "The Handing Over of the Banners." Before going to the Temple area, the four banners of green silk embroidered in gold, that are to be carried in the procession, are brought furled, at nine in the morning, to the offices of the Deputy District Commissioner, who gives them to the traditional bearers. Then a prayer of blessing is said by a leading *Imam* (Mohammedan religious leader) and the flags are borne through the Damascus Gate into the walled city.

In the afternoon the Grand Mufti sets out from the Temple area through Saint Stephen's Gate, or, as the Arabs say, "The Gate of Our Lady Mary," mounted on an Arab steed and surrounded by the Faithful, who have poured into Jerusalem from far and near. As he scales the hill past the Garden of Gethsemane, with his spirited charger dancing in the sunlight, he makes a noble figure commensurate with the great influence that Moslem and Arab thought has had upon the city of their fathers.

I challenge anyone gifted with imagina-

Photograph by Alexander Stewart

WHERE ISRAEL WEEPS

Among the Jews who gather at this Wailing Place, near the foot of the old Temple wall (see illustration, page 645), on Friday afternoons and on Saturdays there are many recent immigrants. They join in replying, "We sit alone and weep," as the cantor chants, "Because of the palace which lies desolate" and "Because of the Temple which is destroyed."

tion to enter the Temple area and remain unmoved. Before him is the Sacred Rock of Moriah, foundation for a succession of temples (see illustrations, page 657). He has stepped into what has certainly been holy ground for 3,000 years, and who knows for how long before that? Through the centuries, generations and faiths have added to its history.

The earliest mention of this holy site in the Bible is when Abraham was told to bring his son to Moriah and offer him as a burnt offering (see Genesis XXII, 1-14). David selected this rock as the site on which to build his Temple. That task denied him, he gathered material and about 1000 B. C. his son Solomon there erected the Temple which was destroyed by the Babylonians 400 years later.

Herod, being an Idumæan, to win the good will of the Jews, offered to build them a temple grander than Solomon's. This was agreed to, on condition that the material should be on the spot, prepared for erection, before the old Temple was taken down. Herod's Temple stood until the time of Christ and many incidents in His life took place there.

In 70 A. D. Titus laid siege to Jerusalem and the Temple was utterly destroyed.

HADRIAN FAILS TO BLOT OUT RELIGION IN THE HOLY CITY

Sixty years later Hadrian, the heathen Emperor of Rome, ordered the whole area to be cleared, and it is said the site was plowed and sown with salt. In a further attempt to destroy all sentiment the Jews might have for the site, Hadrian there erected a heathen temple dedicated to Jupiter, and on its east side placed an equestrian statue of himself, shaded by a golden canopy. By 277 A. D. this, too, was in ruins.

In 534 A. D. the Byzantine Emperor Justinian erected a Christian church over the rock and a large cruciform basilica south of it.

When the Moslems, sweeping over the country in the seventh century, captured Jerusalem, they rebuilt the walls inclosing

Photograph by C. Raad

A COBBLED STEP-STREET IN JERUSALEM

The route of the Via Dolorosa and its fourteen stations, on the way from the House of Pilate to the Holy Sepulcher, have been variously identified several times. Near this spot, now identified as the Eighth Station, Jesus turned to the women, saying, "Daughters of Jerusalem, weep not for me."

the Temple area, erected splendid Saracenic buildings on the south and west sides, took down what remained of Justinian's church over the Sacred Rock, and erected on the same spot a mosque surmounted by a crescent, which remains today (see pages 638 and 656).

This supreme specimen of oriental architecture, one of the most beautiful buildings in the world, is in the form of a flat-roofed octagon with a central dome, 98 feet high. Monolithic marble pillars, surmounted by gilded capitals, surround the bare Rock of Moriah, sheltered pinnacle of this holy hill, which is called Mount Moriah. The building was constructed by the Caliph Abd el-Malek, although it is often erroneously called the Mosque of Omar, after the caliph of that name. Glazed tiles have taken the place of mosaics in its external decoration.

In Arabic the building is called by the beautiful names of "Kubbet es-Sakhra" (The Dome of the Rock) and "Haram

Photograph by American Colony Photographers

FLAGS FLY IN THE TEMPLE AREA DURING THE FEAST OF THE PROPHET MOSES

The view is north from the Mosque el-Aksa toward the Dome of the Rock at the time of the Moslem festival which takes place during the Orthodox Holy Week.

esh-Sherif" (The Noble Sanctuary). From here the Moslems believe the Prophet Mohammed ascended to Heaven on the back of his magic steed with a human face.

A CRUSADER RELIC GUARDS A MOSLEM SHRINE

In the Middle Ages the Crusaders conquered the city and for about 100 years the country was under Christian rule. During this period the Crescent was replaced by the Cross and an iron grill erected around the rock, almost the only existing relic of the hundred years the knights held the city. When the Arabs under Saladin reconquered Jerusalem, the Dome of the Rock was restored and again the Noble Sanctuary was surmounted by a Crescent, but the Christian grill remains.

Much valuable restoration has been carried out during the last few years by the Supreme Moslem Council under the presidency of His Eminence the Grand Mufti.

A poignant Christian pilgrimage is held every Friday afternoon by the Franciscan friars. The start from the first station is made in the precincts of the Prætorium, once occupied by Pontius Pilate, the place where Christ was condemned. It is attended by many Latin orders. Franciscan friars in brown habits and with waists girt about with knotted cords; Dominican fathers in white; the White Fathers; Passionists wearing the sign of the heart; nuns in habits of white, black and silver-gray, their veils and headdresses of all descriptions, go in procession, followed by the laity. From the Prætorium the pilgrimage follows the Via Dolorosa, stopping for prayer at nine stations of the Cross, and passes into the Basilica of the Holy Sepulcher where four stations are made at Calvary, the last of the fourteen stations being before the Holy Sepulcher itself (page 676).

A FESTIVAL AT THE TOMB OF SIMON THE JUST

Christians and Moslems, as well as Jews, come every spring to this festival at the north end of Jerusalem. Simon, a Jewish scribe, was one of a line who passed on the oral law given to Moses, but not recorded in the Pentateuch.

The Church of the Holy Sepulcher is shared by most of the Christian churches. Orthodox, Latin, Armenian, Jacobite, Copt, all have definite chapels and rights to worship within its walls.

The interior is divided into two principal parts, the rotunda and the Orthodox cathedral. In the former is the small shrine or edicule containing the Tomb of Christ. Most of the building dates from 1810, but the eastern dome is Crusader and the Orthodox cathedral is twelfth century. This dome was badly cracked in the recent earthquake and is now being taken down and rebuilt by the government.

THE CEREMONY OF THE HOLY FIRE

The supreme ceremony of the Eastern churches, the appearance of the Holy Fire, takes place at midday on Easter Eve, according to the calendar of Eastern Christendom, in the Church of the Holy Sepulcher. Its origin is uncertain, but that it is derived from ritual and symbolism in usage by the very early Church is undoubted. In essence the ceremony symbolizes the triumph of the Christian faith, renewed yearly in commemoration of the first victory after Calvary.

The Orthodox Patriarch, the *primus inter pares* among the princes of the Eastern churches, enters the edicule over the tomb in which, for this one occasion, all lamps are extinguished. From here he passes out holy fire and distributes it to the crowd thronging the church, which carries it far and wide. Before the World War the fire was borne to the farthest corners of Russia. The Patriarch is assisted by a bishop of the Armenian patriarchate. Representatives of Coptic and Jacobite, or Syriac, sects take part as well.

The ceremony is, however, essentially a rite of the Orthodox Church and representatives of others obtain permission from the Orthodox Patriarch by proceeding to the Orthodox altar and doing obeisance. A Franciscan monk is present throughout the ceremony.

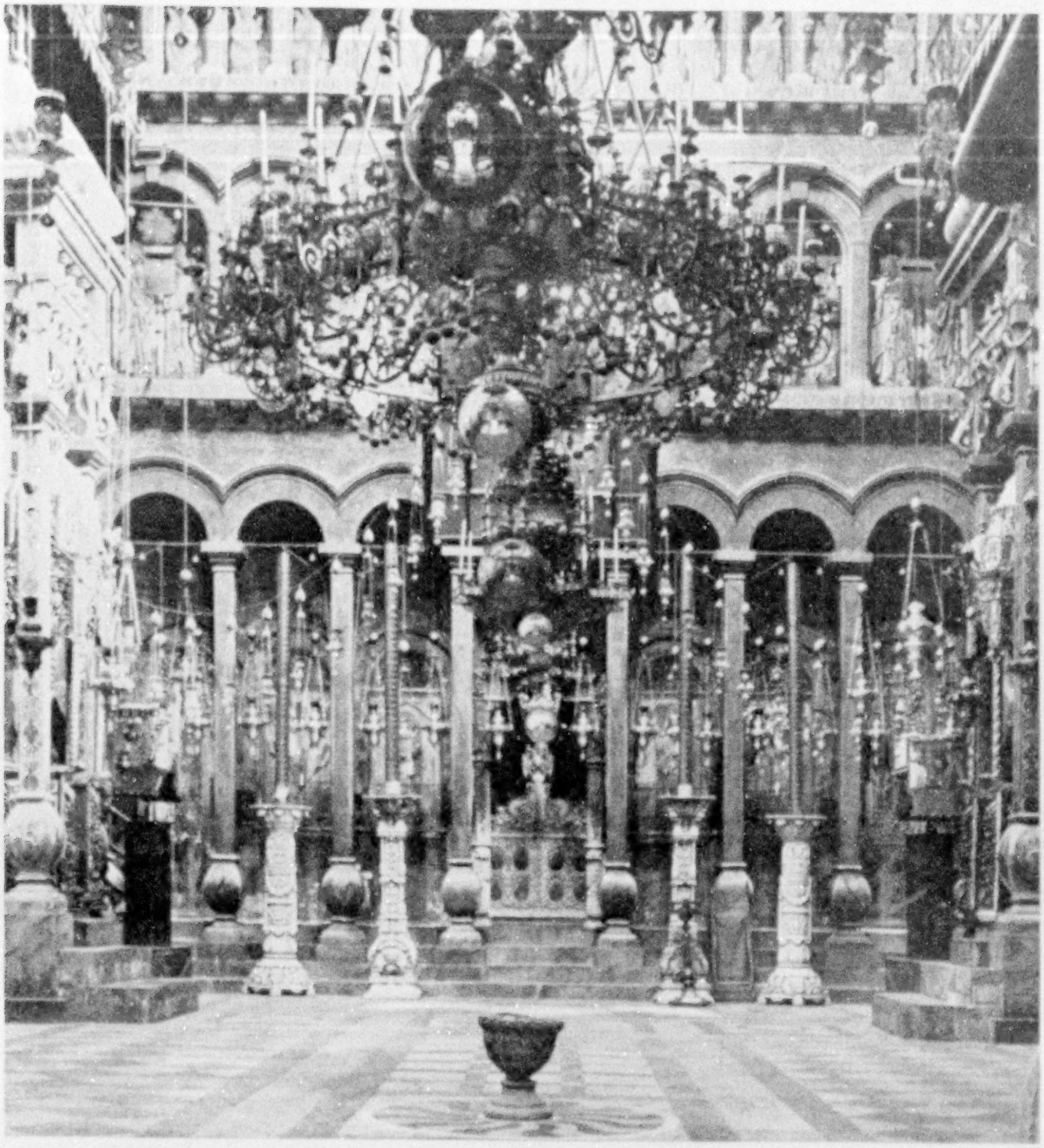
For days beforehand the church is filled with pilgrims. Many sleep there.

The Turkish Government, fearing, not without cause, that the excitement of these

Photograph by American Colony Photographers

"BY THE CROSS SAD VIGIL KEEPING; STABAT MATER DOLOROSA"

On the traditional spot where Mary received the body of Christ, is this figure of the Virgin, richly bedecked with rings, military decorations, and other testimonials from grateful pilgrims.



Photograph by American Colony Photographers

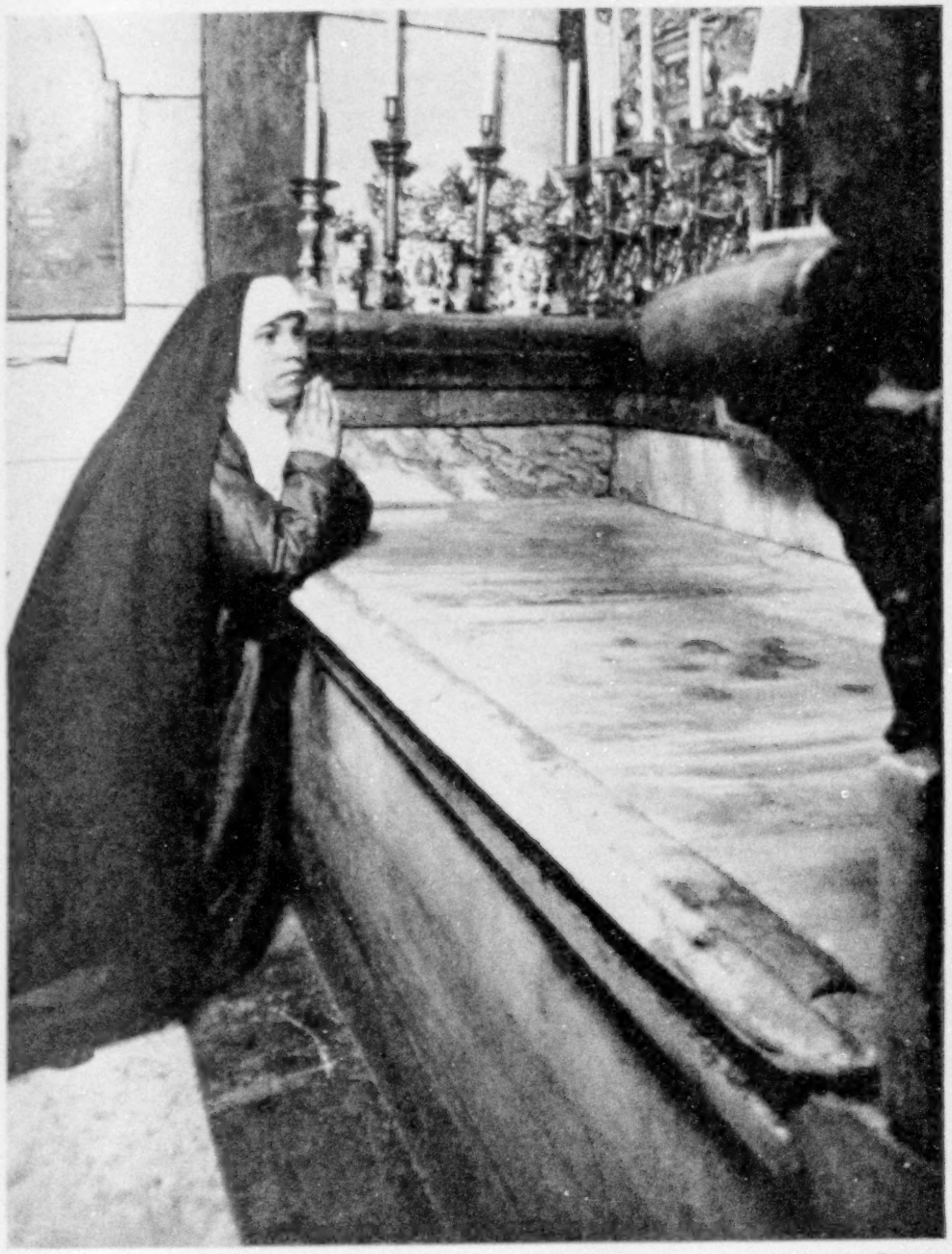
THE CATHOLICON: GREEK CATHEDRAL OF THE CENTER OF THE WORLD

In what was the nave of the Church of the Crusaders is this chapel, the dome of which was damaged during the 1927 earthquake. In the center of the floor is a cuplike urn marking the traditional center of the world. During the Holy Fire celebration (see text, page 673 and below) this chapel, whose ornate iconostasis, or altar screen, is here shown, is crowded with pilgrims and sight-seers.

Easter crowds might result in an outbreak, was accustomed to station a large body of troops in and around the church. Their place is now taken by smaller bodies of police. It is the administration's task to insure order and reverence, and to assist the Patriarch in the service, protecting him, if necessary, from the fervor of his flock.

First the Armenian Patriarch passes in procession around the rotunda and retires; then the Moslem guardian of the Holy Sepulcher, in the presence of one Orthodox and one Armenian archimandrite, exercises his traditional privilege of sealing the doors of the Sepulcher. He first closes them and places thereon a large piece of wax, which holds in place a white ribbon whose ends, after passing through the two door handles, are held by the archimandrites.

At noon the representatives of the other churches do obeisance, before the



THE LAST STATION OF THE VIA DOLOROSA, IN THE CHURCH OF THE HOLY SEPULCHER (SEE PAGE 672)

Inside the jewel-case chapel in the center of the rotunda a cracked marble slab marks the traditional site of the Savior's tomb.

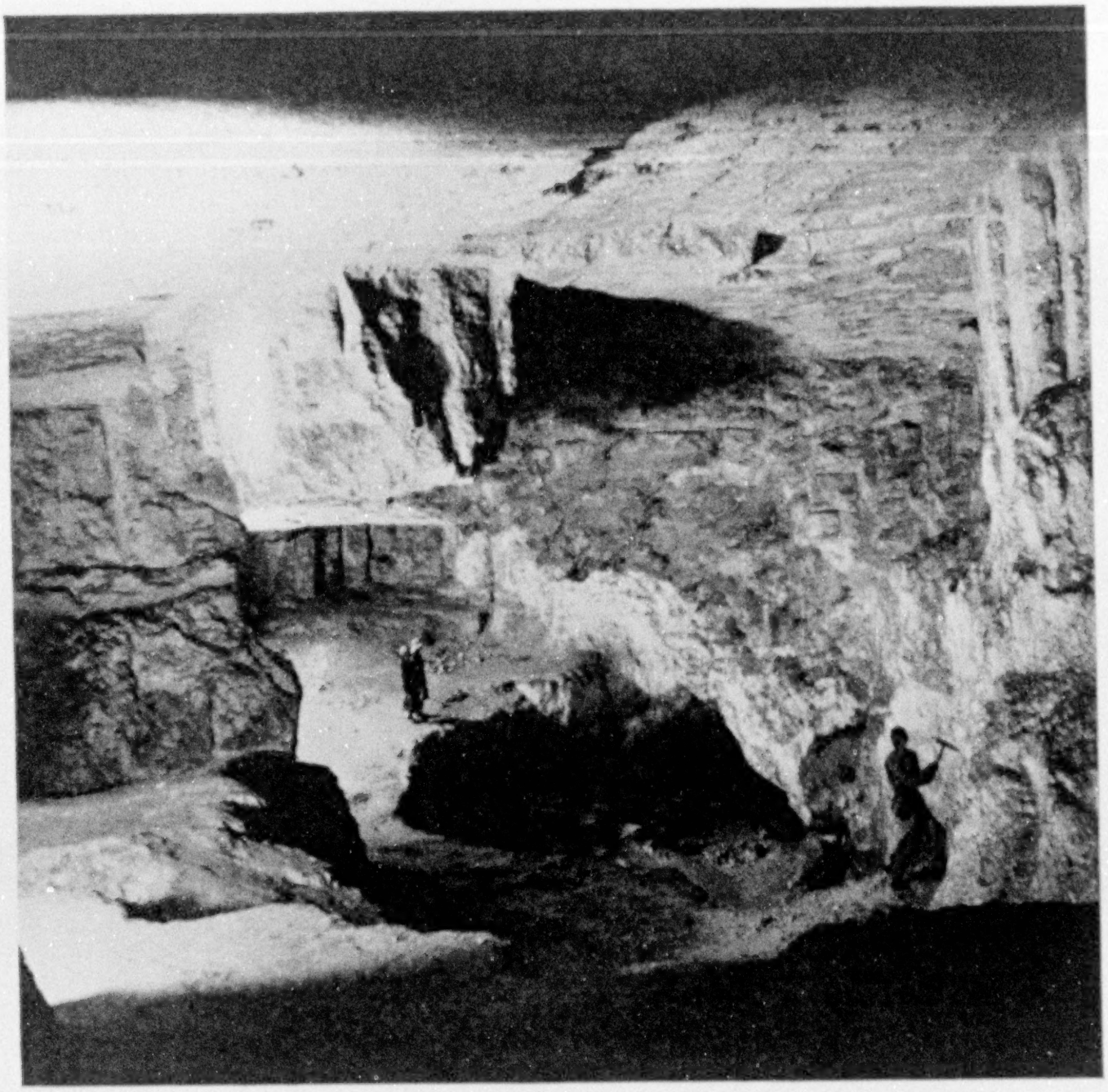
IN THE COURTYARD NEAR THE HOLY SEPULCHER DURING THE HOLY FIRE CELEBRATION

This is a prewar picture, taken when the Turks were in power and when pilgrims from Russia helped swell the Easter crowds.

Photographs by C. Raad

"CHINESE" GORDON CALLED THIS GOLGOTHA—SKULL HILL

To the right of center, shadows suggestive of two eyeholes and a mouth awry give a skull-like impression, and General Gordon, following an old Jewish tradition, identified this as "a place of a skull" (Matthew XXVII, 33-37). At the left are the towers of the Dominican Convent and the Anglican Church, as one sees them to the north from the city wall (see, also, illustration, page 647).



Photograph by American Colony Photographers

"SOLOMON'S QUARRIES," THE "ROYAL GROTTOES" OF JOSEPHUS

Under the north wall of Jerusalem is this vast grotto, which was undoubtedly a quarry. Its stone, however, is unlike any now to be found in the walls of the ancient Temple area. Masonic visitors meet here and gavels are made from the white stone.

altar of the Catholicon, to the Orthodox Patriarch, who awaits them vested in white and gold, with a crown of gold scintillating with enamel and precious stones upon his head (Color Plate VI).

About this time groups of young men enter the rotunda through the Orthodox Catholicon, clapping their hands and singing. One or two may be borne on the shoulders of coreligionists (see page 676). The pressure of the throng becomes intense.

The actual service now commences with the procession of the Patriarch from the Orthodox Catholicon, preceded by 13 banners borne by representatives of leading Orthodox families. They circle the rotunda, through the throng, three times; then all except the Patriarch retire to the Orthodox cathedral. He, disrobed of miter and vestments before the doors of the Sepulcher, enters, accompanied by the Armenian bishop. The Copt and Syriac take position before the doors.

THE HOLY FIRE APPEARS

Tense excitement prevails. All eyes are fixed upon the Tomb. Voices are lifted up. The crowd, holding candles aloft, presses forward, wave upon wave, self-restraint thrown away. The seconds seem long-drawn-out minutes.

Suddenly an Orthodox priest, waiting without the shrine, with a mighty sweep, withdraws his arm from a hole in the edicule, holding a burning torch. The flame appears from the Armenian side also.

The burst of flame is greeted with frantic cheering, the clapping of hands, the ringing of bells and high, piercing ululations from the women. The priest gives the fire to a selected representative of the community, and the crowd opens to allow him to rush with the sacred fire and light the lamps on the altar of the Catholicon.

Each pilgrim presses forward to light his candle; others from the balconies let down their candles on strings to receive the flame. The building is soon ablaze with dancing light.

The Copt and Jacobite enter the door of the Sepulcher and receive the fire from the Orthodox Patriarch, who then emerges, followed by the Armenian bishop, a flaming torch in each hand, the focus for a converging crush of worshipers, frantic to light candles from his torches.

The Armenian, Coptic and Syriac processions now form and circle the rotunda. But the climax of interest has been reached. The visible symbol of resurrection, having been divided and passed on, no longer burns beside the Sepulcher. Slowly the crowds melt away, some climbing past the Garden of Gethsemane to the summit of Mount Olivet.

From the Mount of Olives a matchless panorama of the Holy City is spread before the gaze. Half of the eastern wall borders the magnificent courtyard so worthily framing the Dome of the Rock, which, whether seen from the courtyard itself or from the hilltop, is equally symbolic of religious dignity.

AN EVENING REVERIE IN JERUSALEM THE GOLDEN

Leaving the Mount of Olives, we start down a stony track toward the city. Behind us a purple mist, changing to lilac edged with pink, drifts across the Sea that is Dead, which now looks like skimmed milk in a bowl of brown. Before us the setting sun reddens a cloud, its center like the furnace fired seven times more than it was wont to be heated. Minaret, tower, and dome fade away, giving an indefinite background to the Dome of the Rock, which appears a mere blur of lead in a white courtyard.

The sun disappears and the heavens westward change from red to gold, to orange, and to pink.

A few early lamps from the Saracenic arches of the Haram or from houses in the Old City glimmer across the valley like pale-gold stars.

The stony track wanders through scattered patches of grain dotted with old, old olive groves, and past a sheltered nook where fig trees have found a holding, safe from the winds.

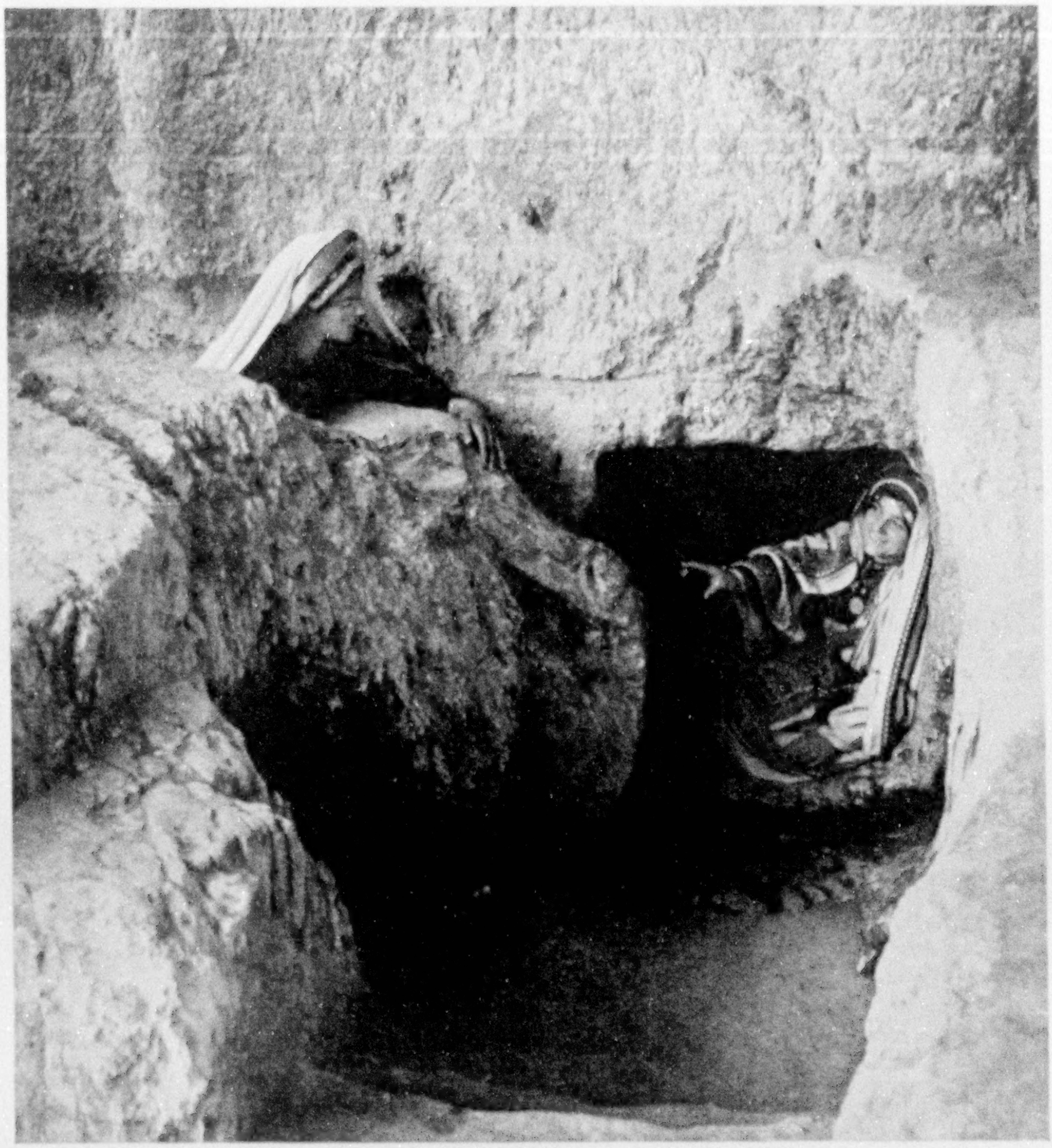
Parts of the city gradually detach themselves from the sunburnt mass. First, the tower of the Italian hospital is outlined on the colored horizon; then the Anglican cathedral, and on Mount Zion the German church; then minarets and spires within the walls, and finally domes of mosques, synagogues, and churches, until, for a few brief minutes, all stand out in bold relief like a train of camels on a desert skyline.

As we descend the rough path, the weather-beaten golden domes of the Russian church below us in Gethsemane look like burnished brass topped with lead. Unexpectedly the sound of their bells crashes out through the quiet of evening and as suddenly dies away. An answering call comes from others across the valley, and then a brief silence until from the Haram the voice of the muezzin calls the faithful to prayer—one clear call.

A peal of church bells lilting across a valley may inspire, but for wistful beauty nothing equals a silver-voiced muezzin calling to prayer. In those few short sentences the pathos, the warmth, the vehemence, the enthusiastic ecstasy, of Islam are heard, and he who follows the Prophet must be cold indeed to withstand the appeal.

We stumble on the steep slope. Voices of shouting children are heard. In a leafy tree a baby is hanging while his mother works in the field. She steps toward him and, taking down the hammock, swings it across her back to carry him home, while the father sets forth, sitting sideways on his donkey.

A boy passes, humming a ditty, and higher up the mount a voice is heard calling him to hurry home. We reach the



Photograph by C. Raad

AT THE ENTRANCE TO THE TOMBS OF THE KINGS

These two women, wearing the Ramallah costume, so named from a prosperous village ten miles north of Jerusalem, are at the only entrance to the tombs whose mortuary chambers have room for 31 tombs. According to an old tradition, Queen Helena, mother of Constantine the Great, was buried here.

bottom of the valley and pass the shrine erected over the tomb of the Virgin Mary. The door is closed; the shrine is hushed.

A WALK THROUGH THE HOLY CITY BY NIGHT

Passing the tomb of Absalom, we cross the bridge over Kidron, of which a stately cypress is guardian, and reënter the city by the Gate of Our Lady Mary (see, also, text, page 669).

The walls shut us in. Darkness has fallen. It is as though we had entered a room, but the strip of sky is silver with one gleaming star. Before us, westward, leads the somber Via Dolorosa. Seated in the gateway, an old man rocks his grandchild to sleep. An oil lamp flickering in the breeze guides our way along the cobbled path.

In a coffee shop the proprietor is taking down the water pipes for evening customers.

Through a beautiful archway, we reenter the Temple area. The heavy wooden gate is locked, but a part is still open. An old man, striking the pavement with his stick, calls on "the name of God" as he bends to enter.

TWILIGHT IS THE PRAYERTIME OF THREE FAITHS

Two Mohammedans are saying their evening prayers. Little groups of people are also at worship. Women, their veils fluttering in the wind, press homeward along the short cut through the Temple area. Chimes from the tiny church bells of the Sisters of Zion float across the air. A wee Moslem child is heard repeating the wisdom of his fathers, *Allah el Akbar*—"God is Greatest."

Passing an imam with a white kerchief bound about a red fez, we mount the raised plateau, on which rises the Dome of the Rock; he wishes us "the peace of God." A lamp throws the Mosque el-Aksa (see illustration, page 638) into relief beyond black cypress trees. A feeling of peace, of dignity, of hope, of the mercifulness of God, comes over us, as we leave the Dome, descend the steps and enter an old vaulted building which overlooks the Wailing Wall.

Through a barred window, in deep shadows, we see the ancient wall. A chorus of lamentations beats the air like the wave roar of a distant sea, but from time to time a staccato voice, rising above the others, carries a sound of pulsating, throbbing, poignant sorrow. The voices die away, but each time a fresh burst of lamentation echoes through the vaulted room (see illustration, page 670).

The wall is in almost complete darkness, but as the eyes become accustomed, figures of individuals gradually stand out. Women leaning against the great stones are silent except for dull, half-stifled moans: a few old Yemenites, sitting at the back of the alley, nod their heads in unison to the fervent dirge of those who bemoan the fate of Israel.

There they stand, in long coat and skullcap trimmed with fur, wide felt hat or modern straw. The worshipers continually throw their heads backward and forward and from side to side, shaking themselves as they pour forth fervent lamentations to God. The throbbing sound follows us like a poignant plea for pity, as we ascend to David Street.

Restaurants and coffee shops are aglow, and an Arabic song from a gramophone strikes harshly on the ear. A richly saddled donkey stands across our path, waiting to take his master home. Men squatting on low coffee stools exchange gossip. A merchant with a shop below street level lifts himself up by a chain to close the shutters.

A CITY OF SHADOWS AND PEACE

Color has gone from the bazaar and the arcade of the silversmiths. The arched tunnel is black, with a point of light at the far end; the color and charm of the merchandise have disappeared behind wooden bars. Smells of sandalwood, spices and curry alone remain.

A blind man comes slowly along, tapping the timeworn stones. Near the entrance to the courtyard of the Holy Sepulcher a tailor works late finishing a job for the early morning and a heavy iron sizzles on damp cloth.

From the low entrance to the courtyard, an old man emerges, calling, "Allah, Allah." The courtyard is almost deserted; the great doors of the Church of the Holy Sepulcher are about to be closed. In the darkness, a tiny lamp flickers over the Stone of Unction. Little groups, shadowy phantoms, stand about chanting, "Kyrie eleison" ("Lord, have mercy upon us and bless us"). A man says his prayers before the shrine, which is outlined by olive-oil lamps. Calvary is flooded with light from candles of the faithful. As we pass through the church, the groups fade into the background. Peace reigns.

As we reach the Damascus Gate, the "Last Post" sounds from the police camp on Scopus.

Our walk gives meaning to the city's pageantry. Christian, Moslem, Jew, each is maintaining in his own way, and by customs hallowed through the centuries, his relationship with God. The vivid daytime is superseded by the beauty of a starlit night. And so we leave it, Capital of three great Faiths, in the peace of eventide—the Holy City still.

COLOR RECORDS FROM THE CHANGING LIFE OF THE HOLY CITY

By Maynard Owen Williams

FORTUNATE the man who can help to preserve something of the life of the Holy City. More fortunate is he who can record in natural colors bright spots in the life of a city whose appeal is world-wide.

He must approach his task with sympathy and reverence, for his model is loved and idealized by Moslems from the Near and Far East, Sunday-school teachers from the Far West, and Jews from half the world. Unless he pictures with understanding the city where world brotherhood was proclaimed, he may engender dissension. The pictured city must ever remain the Holy City.

Neither brush nor camera has fully recorded the color of Jerusalem. From blinding light to gloom runs the bright ribbon of oriental life, now vivid and moving, now stilled in tone and tempo by the murk of arched tunnel or the peace of quiet mosque. In ever-changing sunshine and shadow, no two eyes see the same, no two brains retain like memories.

Before the World War, Jerusalem was my vacation home, the lodestone of my dreams, its bustling life a constant challenge to my untrained lens. At Easter time and in the heat of summer I haunted favorite corners, marking the sun's path along the Via Dolorosa, begging Arab, Jew, and Christian to pose for an instrument whose very look they dreaded, or trying to separate from mobs of pilgrims the brocaded robes of sectarian princes.

Fierce contrasts of light, the passive resistance of those to whom the picturing of a human face is anathema, the stiffness Orientals show before a camera, so different from the freedom of their unstudied life—a thousand drawbacks could not down the desire to share with homeland friends the never-ending charms of this shrine of beauty and of dreams.

But each time I returned I found the Holy City changed. Where queenly peasant women had stalked along, their tattooed faces shaded by wide trays of vegetables, short-skirted cosmopolites carried parasols to save their complexions. Derby was replacing tarboosh, and trousers the flowing robes that still made desert men seem Biblical.

Here was a city, sacred to Moslem, Jew, and Christian, losing the character for which it had been distinguished for centuries. I longed to record something of it before it was too late.

Then came an unparalleled opportunity. A friend who knew of the National Geographic Society's efforts to preserve the very colors of a changing world was made governmental head of Jerusalem.

Mere authority could not have broken down the barriers. Not even the District Commissioner could order a rabbi to sit for his portrait or a Moslem girl to risk the criticism of the ignorant or the unfriendly. But Major Keith-Roach (see "The Pageant of Jerusalem," pages 635-681) had established relations of friendship with all classes and sects, and he undertook to enlist the coöperation of those individuals shown in autochrome in succeeding pages. Moslem and Jew and Christian eagerly collaborated to record something precious in oriental life that is slowly fading.

PRINCES POSE FOR THEIR COLOR PORTRAITS

One cannot ask an ecclesiastical prince to take his priceless jewels and rich brocades away from his residence, and, since color photographs require sixty times the amount of light of ordinary portraits, he could not be pictured inside his palace. At the Orthodox Patriarchate, the one spot determined by the position of the sun and the age of my model was on a balcony outside his rooms. To pose in the full heat of a June sun is trying work; so I focused on another churchman, and when His Beatitude stood on the same spot, I exposed two plates so quickly that he was amazed to learn that the ordeal was over (Plate VI).

The Latin Patriarch (Plate II) was also photographed on a narrow balcony, but with the head of the Abyssinian Church I was more fortunate. The monastery of these Christians from near the Equator is on the roof of the Chapel of St. Helena, Roman empress and Christian patron. The Superior (Plate I) awaited me with eight gorgeously gowned attendants. Brocades and jewels made a striking confusion of details.

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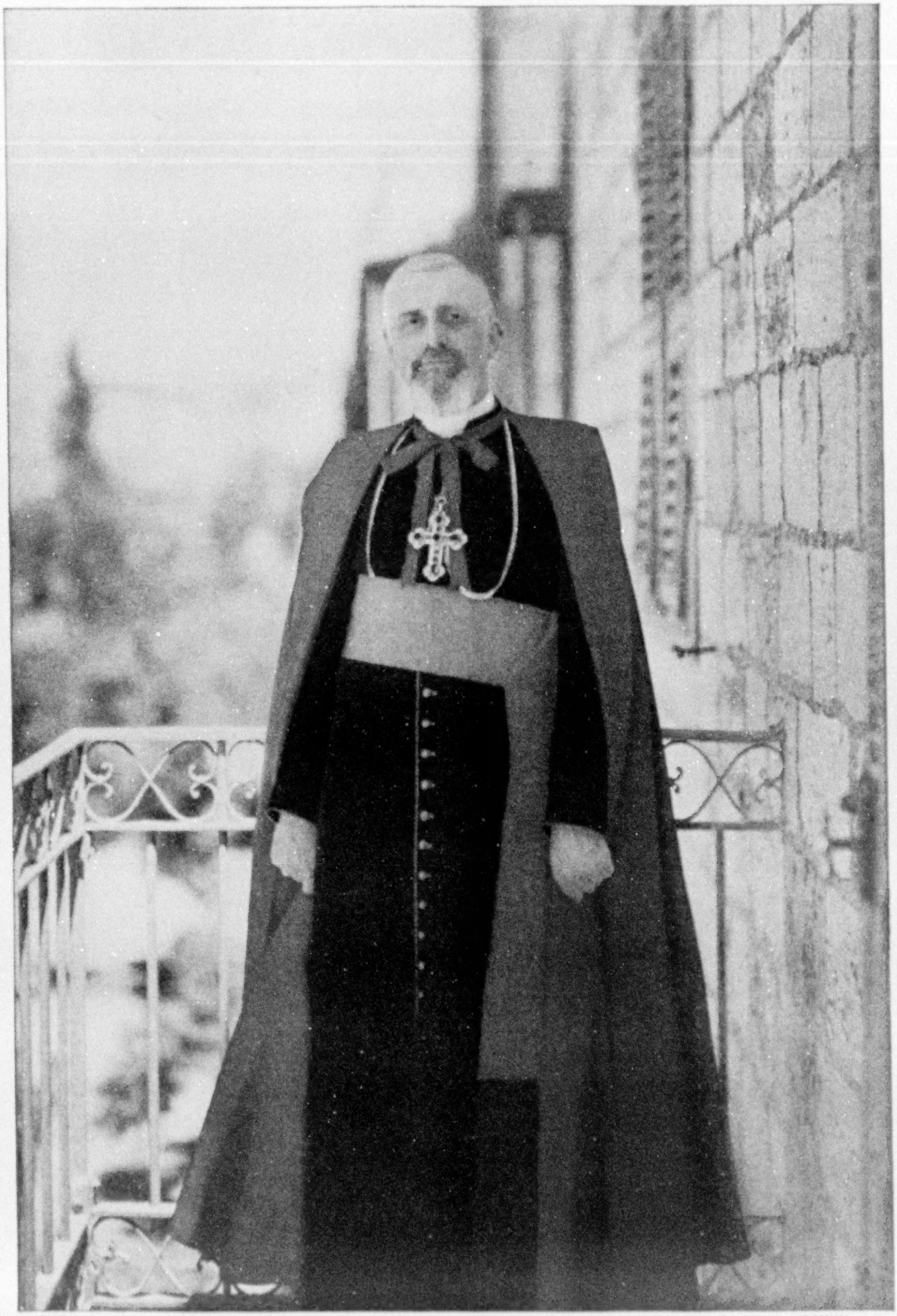
Lumière by Maynard Williams

THE QUEEN OF SHEBA'S SPIRITUAL DESCENDANT IN THE CITY OF SOLOMON

The Very Reverend Mikhail Tesfa, Superior of the Abyssinian Convent in Jerusalem.



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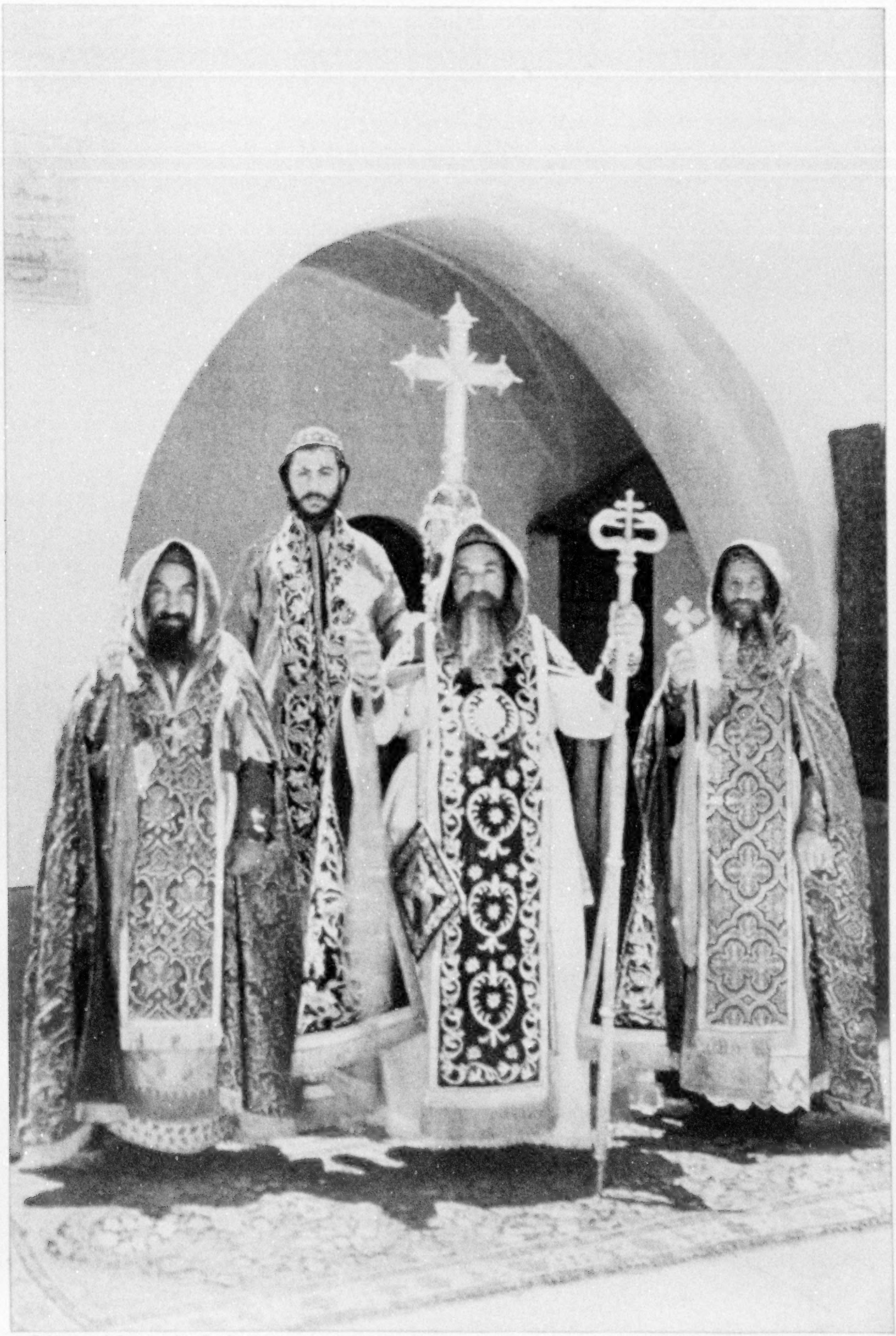
THE LATIN PATRIARCH OF JERUSALEM, HIS BEATITUDE LUIGI BARLASSINA

He represents the Roman Catholic Church, which had its Patriarchate in the Holy City from 1099 until 1187, when Saladin captured it. In 1847 the Patriarchate was re-established.



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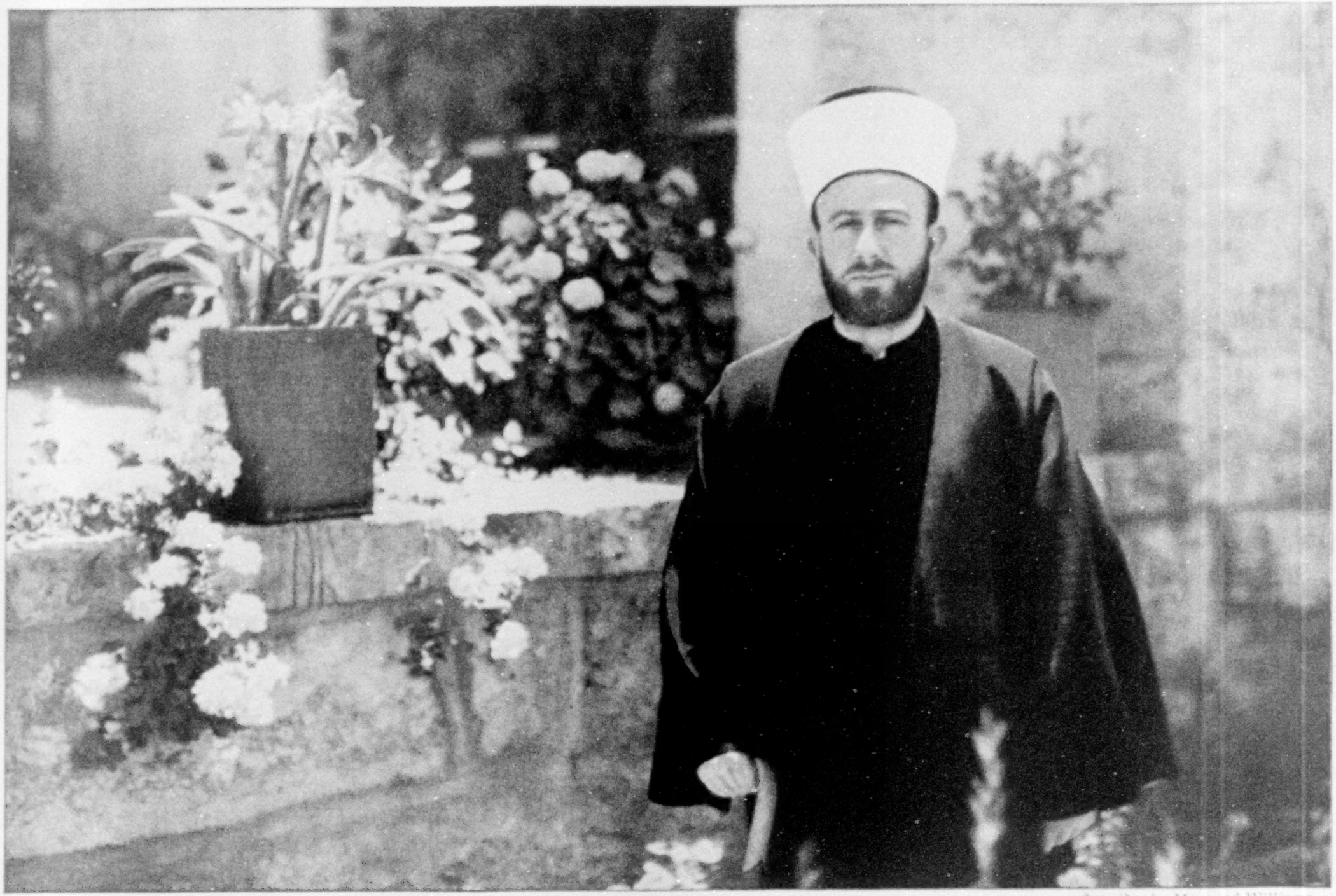
LEADER OF A CHURCH WHICH USES THE LANGUAGE SPOKEN BY CHRIST

His Beatitude Ignatius Elias III, Syriac Patriarch of Antioch, whose followers, called Syrian Jacobites, are found near Mosul and on the west coast of India.



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THE SPIRITUAL HEAD OF PALESTINE'S 600,000 FOLLOWERS OF MOHAMMED

His Eminence Haj Amin Al-Husseini, President of the Supreme Moslem Council, is standing near the traditional site of Pilate's Judgment Hall.

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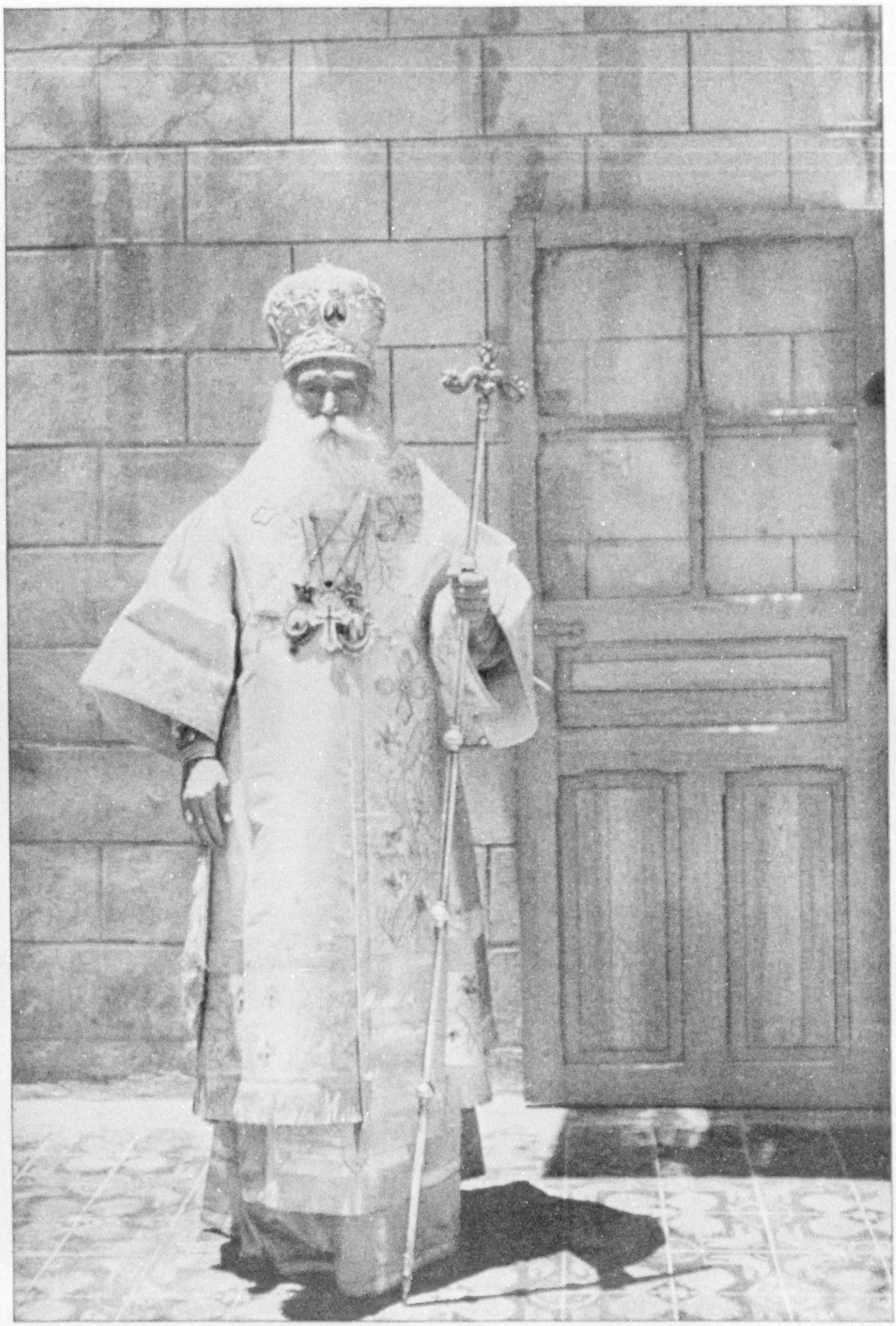
THE ISOLATED LEADER OF RUSSIA'S CHRISTIAN MILLIONS WHO NOW SEND FEW PILGRIMS TO PALESTINE

The Most Reverend Anastasse, Archbishop of the Russian Orthodox Church, in front of the Russian Cathedral, once crowded, now almost deserted.



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HIS ROBES ADD COLOR TO THE HOLY FIRE CEREMONY ON EASTER EVE

His Beatitude Damianos, Orthodox Patriarch of Jerusalem, whose title distinguishes him as head of the Greek Church.

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CHIEF SPIRITUAL LEADER IN JERUSALEM OF EGYPT'S CHRISTIANS

The Right Reverend Basilios, Coptic Bishop of Jerusalem. A Coptic chapel is attached to the Holy Sepulcher itself.

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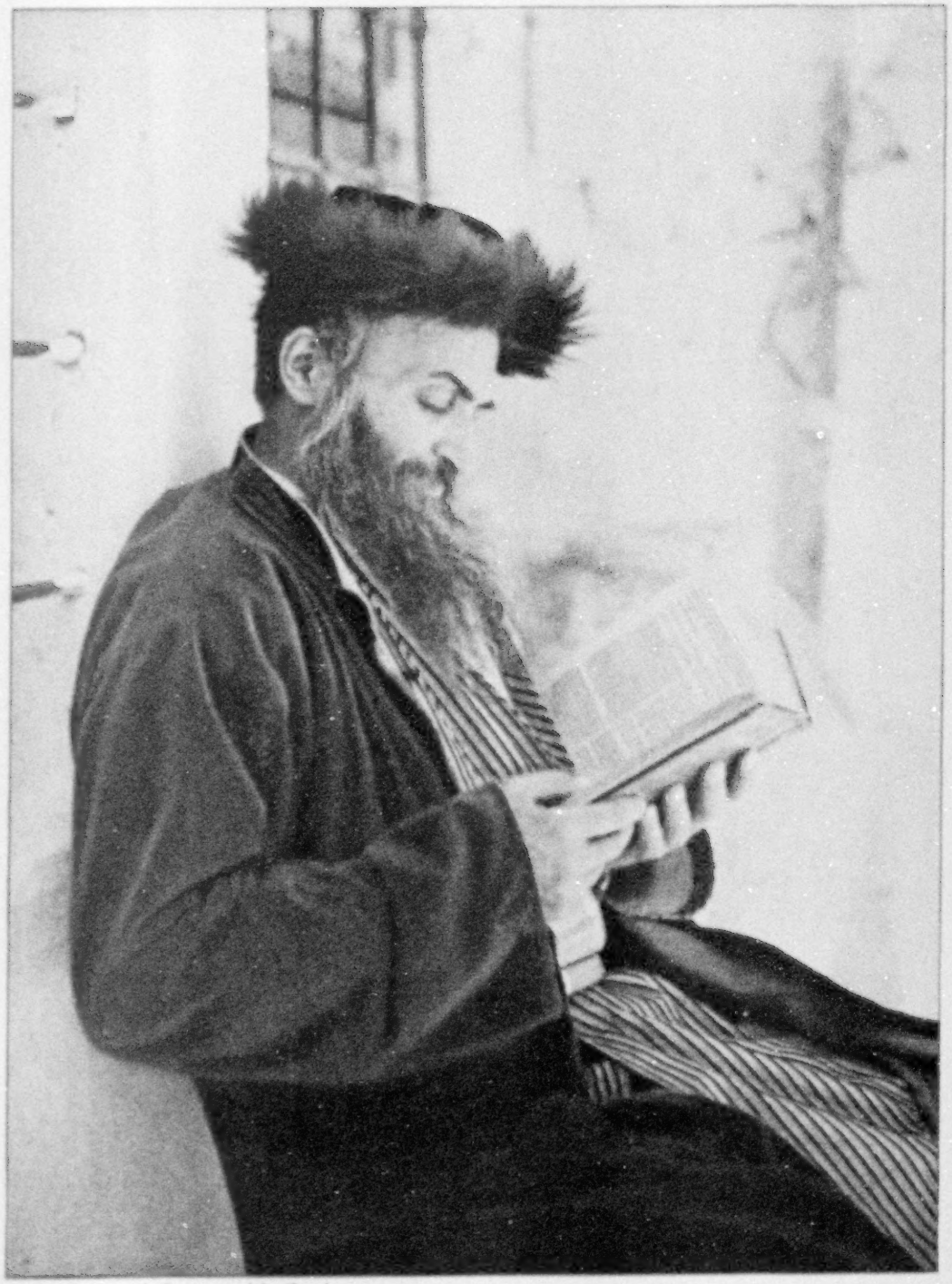
HE REPRESENTS A PATRIARCHATE DATING FROM THE SEVENTH CENTURY

The Right Reverend Monseigneur Matheos Kaikdjian in the courtyard of the Armenian Patriarchate of Jerusalem.



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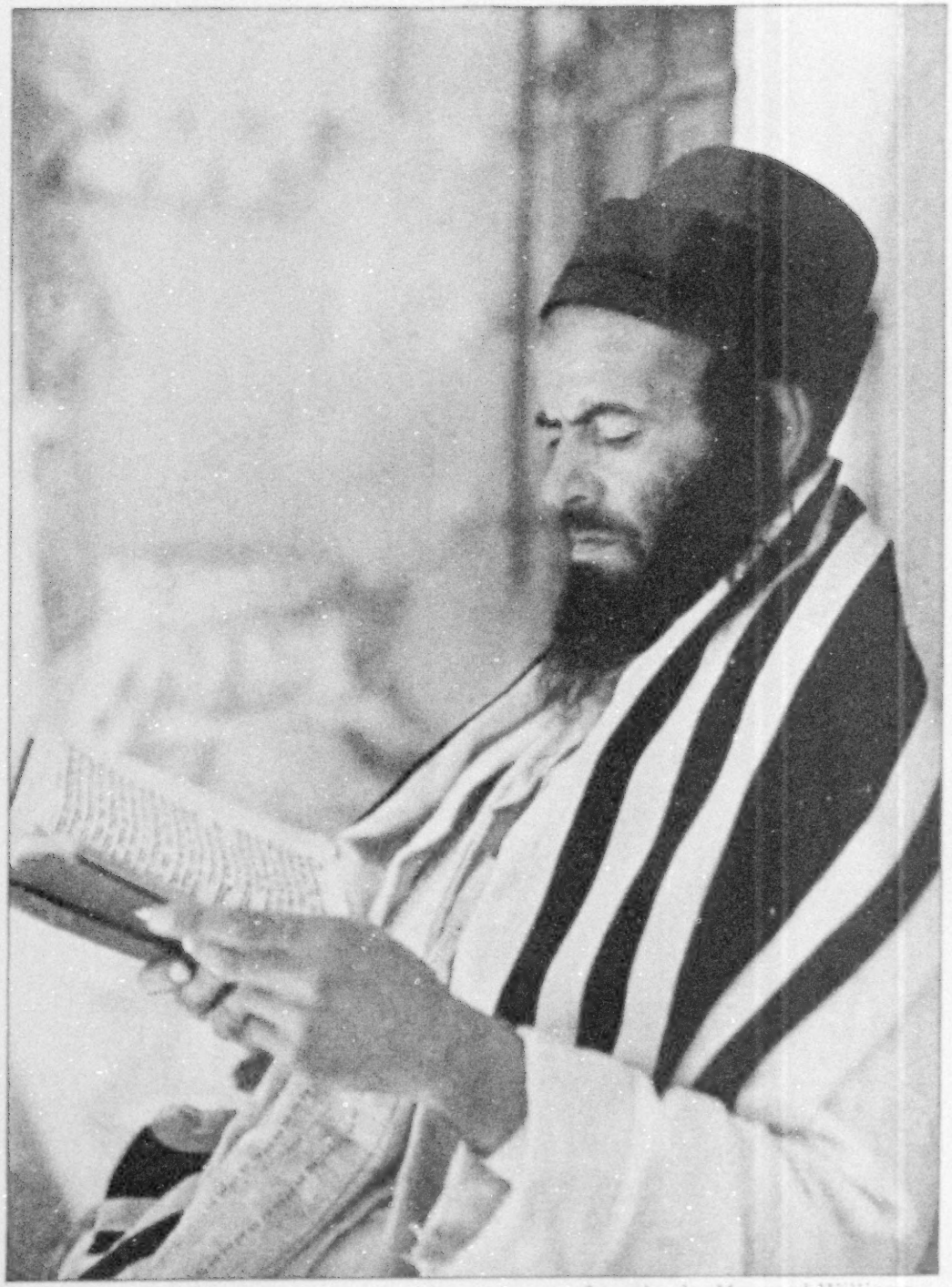
A HUNGARIAN JEW WITH FUR-BRIMMED CAP AND PLUSH COAT



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A YEMENITE JEW WEARING THE RED FEZ AND STRIPED SCARF

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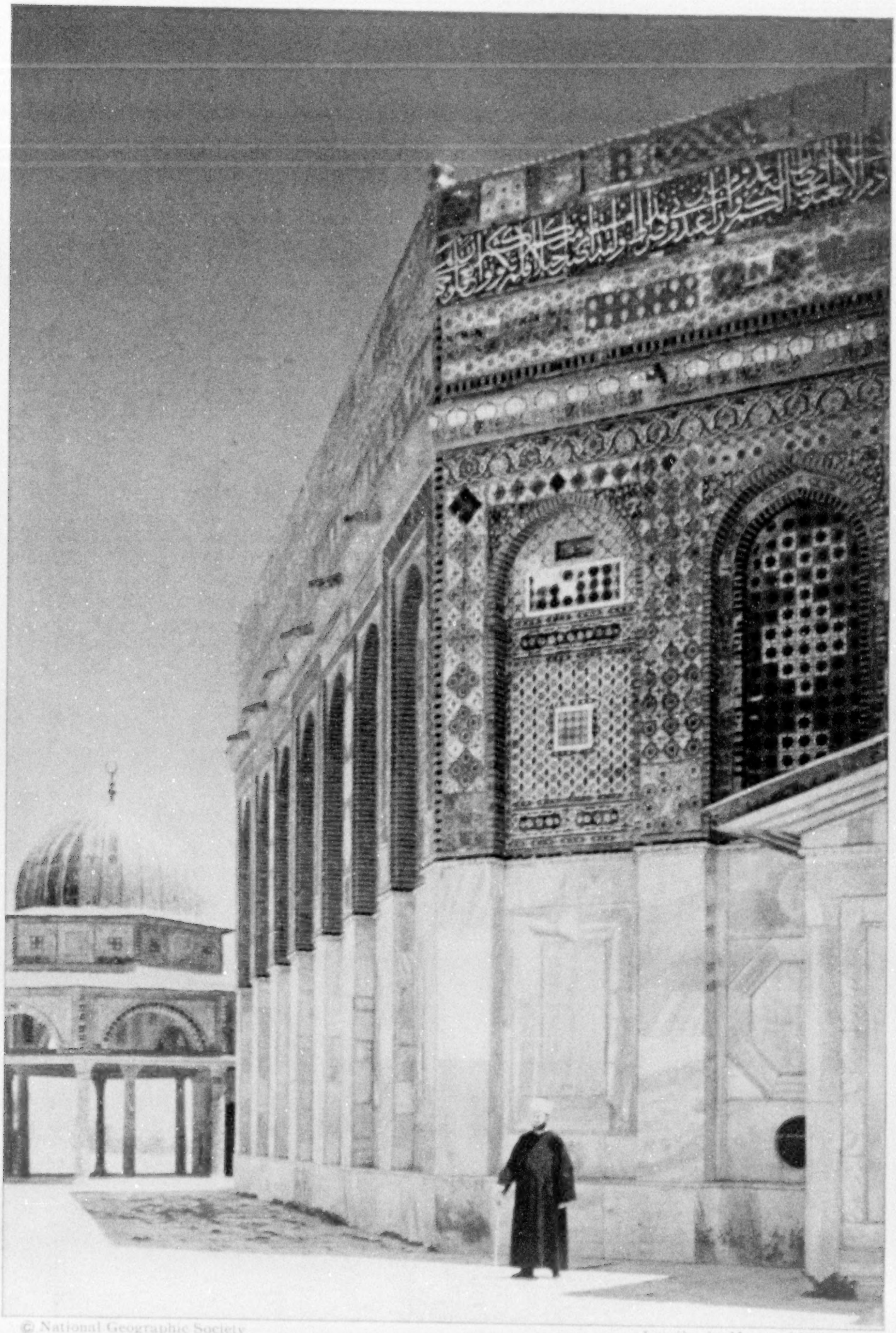
SHEIK JACOB BOUKHARI, DIRECTOR OF THE TEKKIYEH NACHSHABANDIYEH

His convent is one of many set apart in Jerusalem for gaily robed Moslem pilgrims from Bokhara, Afghanistan and other parts of central Asia.



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THE POLYCHROME TILE-AND-MARBLE WALLS OF THE DOME OF THE ROCK

At the left is the Dome of the Chain, after which the larger mosque may have been patterned. The tiles were added by Suleiman the Magnificent.

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THE PEASANT WOMAN OF BETHLEHEM WEARS THE BRIGHTEST OF PALESTINE'S FOUR TYPES OF COSTUMES

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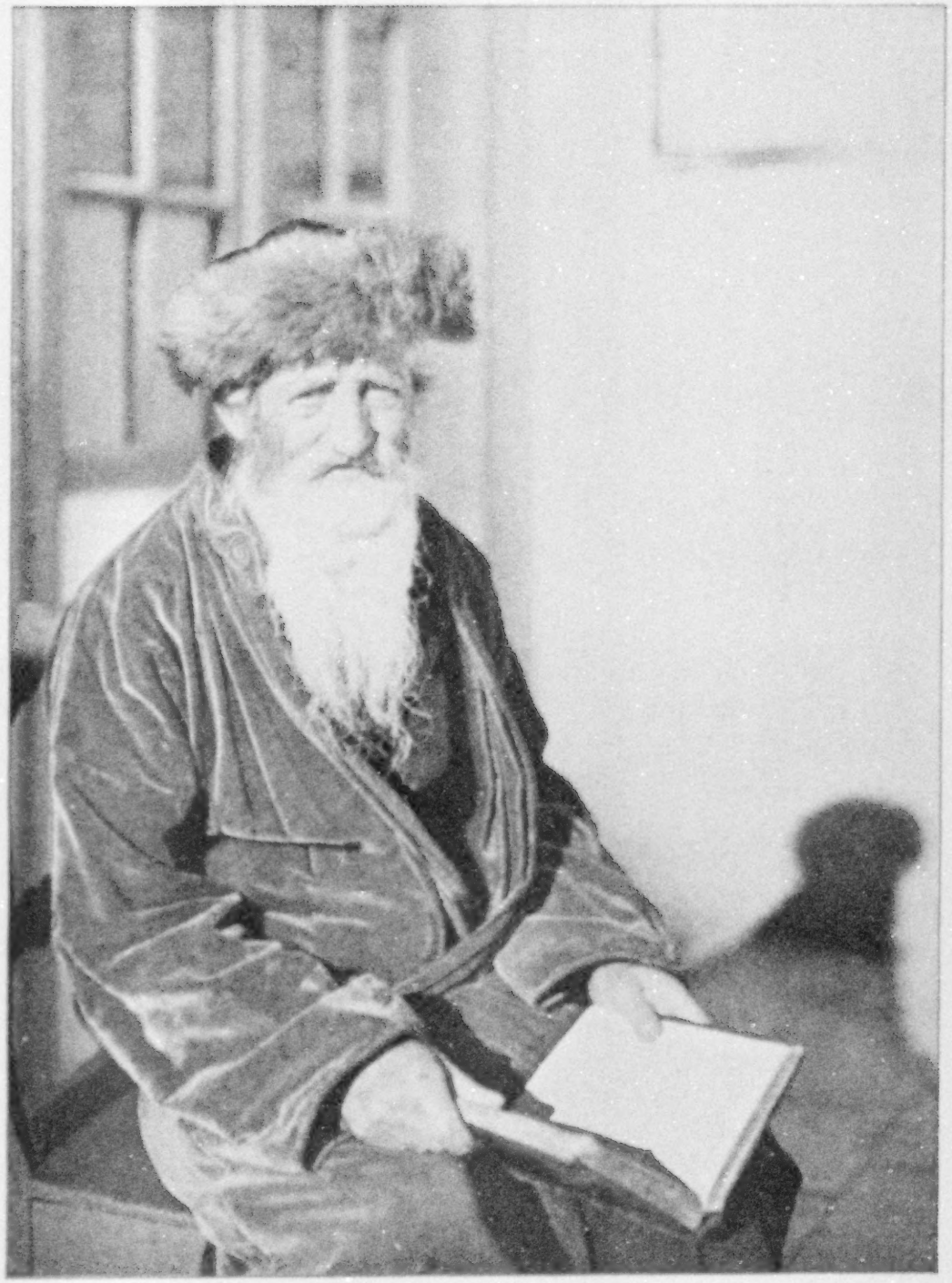
THE KAVASS, OR PERSONAL ATTENDANT, OF THE BRITISH HIGH COMMISSIONER OF PALESTINE



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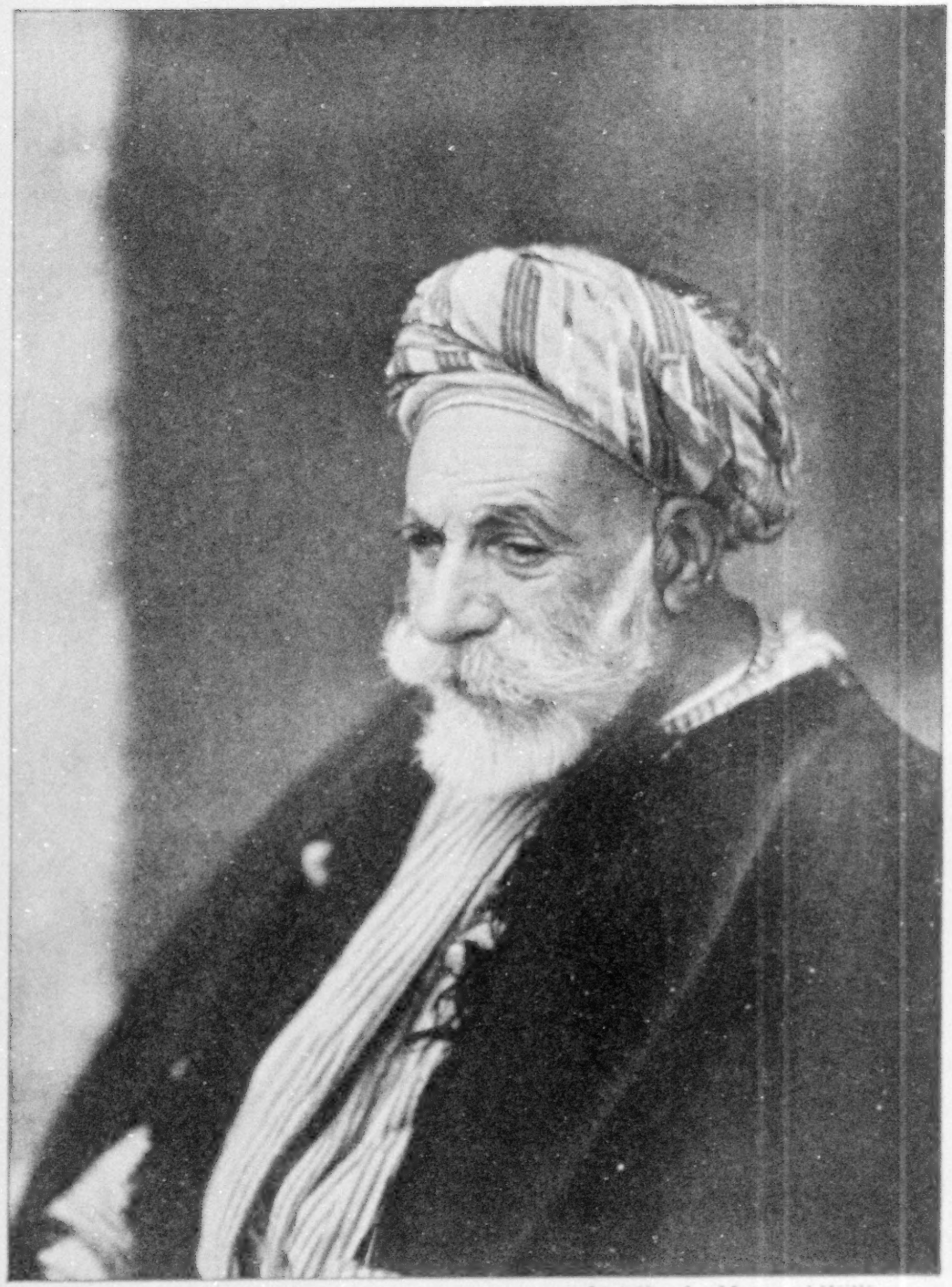
A SPIRITUAL PROXY IN PALESTINE FOR ASHKENAZIC JEWS IN CENTRAL EUROPE WHO CANNOT VISIT THE HOLY CITY



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A TURBANED SHEIK OF BETHLEHEM DURING A VISIT TO THE GOVERNMENT OFFICES IN JERUSALEM

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MANY AMERICAN VISITORS TO JERUSALEM WILL RECOGNIZE THIS GIRL

A young Christian student in a handicrafts class at the American Colony is here wearing the Bethlehem costume.

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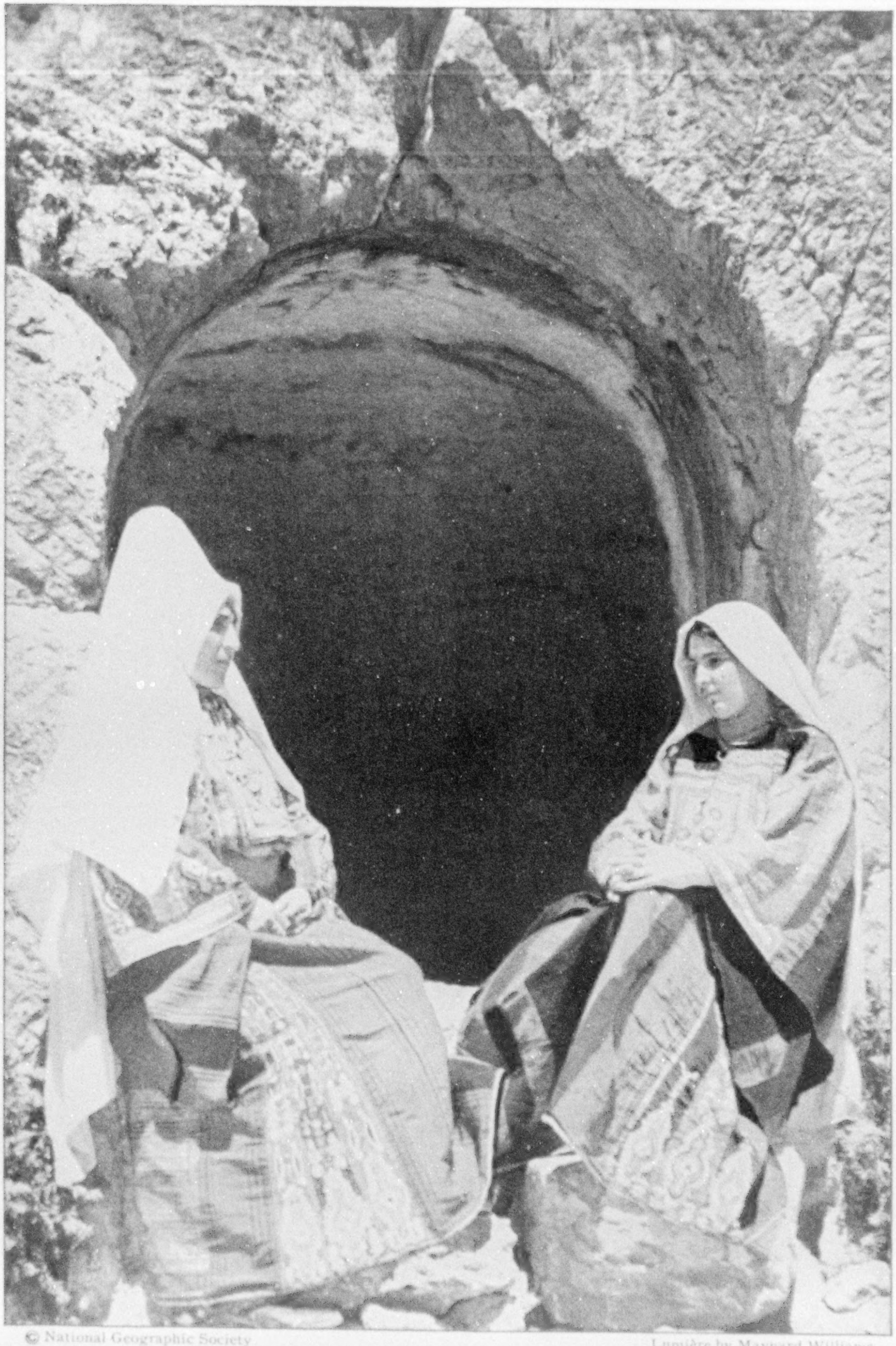
MOSLEM WOMEN OF BETHLEHEM IN THE TEMPLE AREA AT JERUSALEM

The high tarboosh is worn by married, the simple veil by unmarried, women. In the background rises the Dome of the Rock.



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AN ANCIENT CISTERN AT THE TOMBS OF THE KINGS

The well-bred Moslem mother and her daughter are defying tradition in braving the color camera as a gesture of friendship toward friends in America.

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CENTRAL ASIAN SPLENDOR SAVED IN RETREAT

In Jerusalem is a large community of Bokharan Jews, refugees from Russian Turkestan, who brought from the land of their nativity richly brocaded robes.

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A REBECCA WHO KNOWS THE VALUE OF A VEIL

This Jewess of Bokhara borrowed from fellow refugees a costume that made her a charming picture.

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A PERIPATETIC SODA FOUNTAIN IN THE WALLED CITY

Two clinking cups advertise the shop. The smaller pitcher contains rinsing water for the glasses; the cooling drink is in the larger one.

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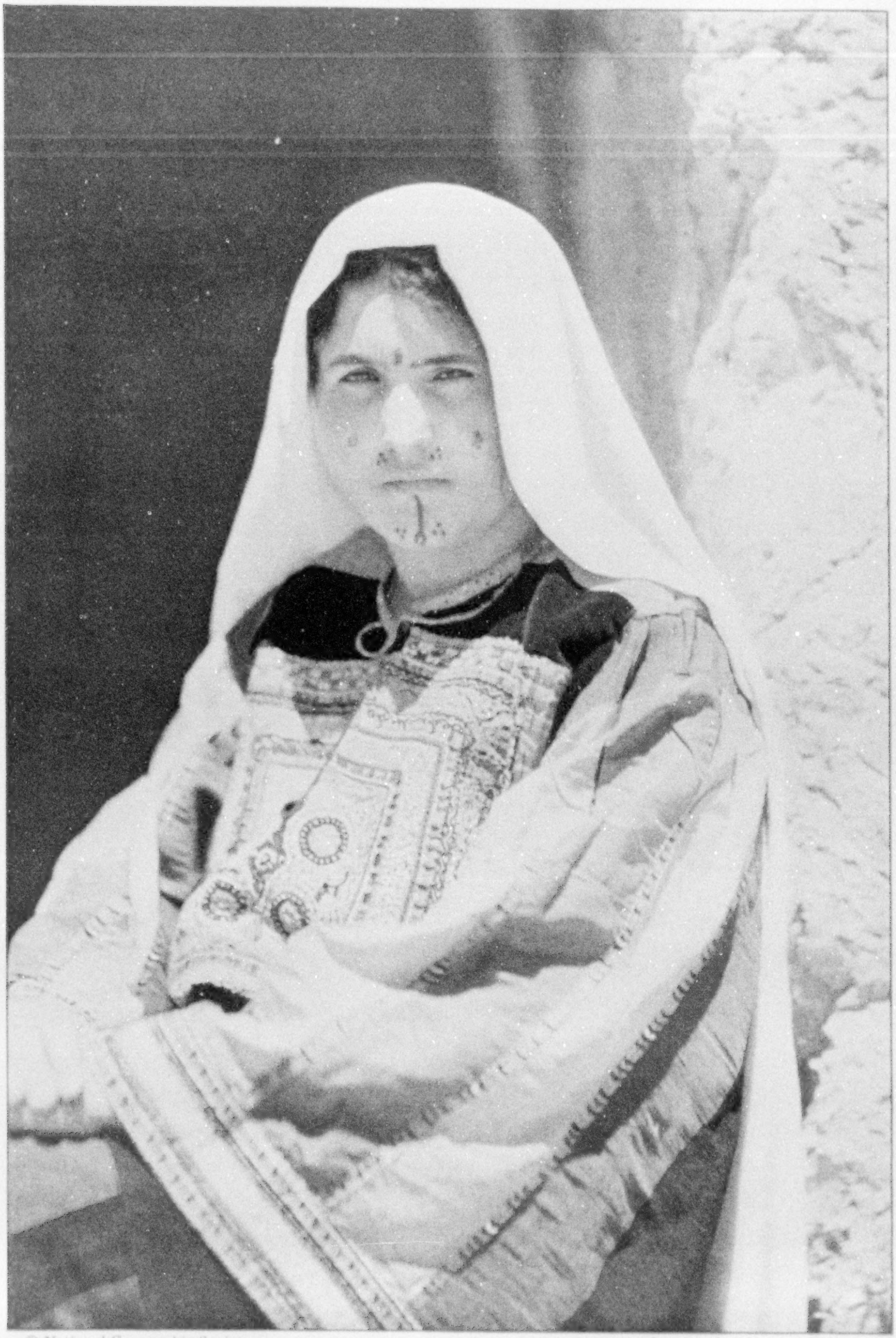
JUDGMENT PLACES, PAST, PRESENT AND FUTURE

The minaret rises above the site of Pilate's Judgment Hall. Under the dome at the left, the Supreme Moslem Council pronounces judgment on contemporary policy. From the arcade in the foreground will be suspended the scales in which, according to Moslem faith, the souls of saints and sinners are to be weighed on Judgment Day.



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AN EIGHTEEN-YEAR-OLD MOSLEM GIRL OF BETHLEHEM

Clad in bright robes, and with her face attractively tattooed, this young woman thinks it immodest to show her perfect teeth to the camera. Almost solid embroidery covers the front of her dress, but her head shawl is the plain white worn by unmarried women.

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IN THE HEART OF THE JEWISH QUARTER IN JERUSALEM

Shadowy passageways lead to this bright courtyard of a tiny synagogue where the Jews congregate for devotional services.

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A BOKHARAN JEWESS REPAIRING A COAT OF MANY COLORS

To the colorful complex of Jerusalem the Jews from all parts of the world contribute their full share of vivid hues.

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Lumière by Maynard Williams

THREE MEN OF THE EAST

In chests to which they clung during months of flight from Bokhara and Samarkand, many Jews living in Jerusalem have kept such rich robes.

I wanted to photograph the Grand Mufti (Plate IV) in that beauty spot to which every traveler hopes, some day, to come—the Temple area, where Abraham was ready to sacrifice his son; where Solomon's Temple, so minutely described in First Kings, was built; where the Dome of the Rock, polychrome jewel casket for a stark native rock, built by the Moslems, now stands.

The bright tiles of the Mosque do not begin at the ground (Plate XI) and hence could not form a background for His Eminence if I were to get a close-up of the man himself; so I had to ask him to pose among the flowers of a garden where Pilate's Judgment Hall once stood, and where two former students of mine, one a Moslem and the other a Christian, now teach in a Moslem school for boys.

When I entered Russia last year I left unfulfilled a promise to send copies of a photograph I had taken in Bethlehem to the Syriac Patriarch (Plate III). When, after half a year, I kept my promise, His Beatitude was so surprised and pleased that when I asked him to let me picture him in color he willingly consented. In the meantime I had visited many of his followers near Mosul, and we talked for a long time about them and about his Syrian Jacobite followers in India.

Equally interesting was my visit with the Russian Archbishop (Plate V). The once-teeming Cathedral is almost deserted now and in sore need, but the Archbishop was keenly interested in discussing the changes I had witnessed in Russia during the Revolution and again last year.

Purple and blue and gold—princely colors—featured the bright vestments of the Copts (Plate VII), and at the Armenian Church of St. James, with its beautiful tile walls, the bishops chose from vast cupboards the rich robe for one of their number (Plate VIII).

My failure to secure a satisfactory autochrome of His Eminence Jacob Meir, Chief Rabbi of the Sephardim (see page 653), was a sore disappointment. No religious leader was more cordial and none was I more anxious to honor.

The Jews of Jerusalem are a retiring people and color photographs of them were obtained only after long negotiations. In one obscure courtyard a Hungarian Jew (Plate IX, left, and Plate XXII) consented to let me picture that costume which brightens the somber multitude at the Wailing Wall, and a Yemenite represented that obscure group of Jews who lived among the Moslems in the land whence comes the veritable Mocha coffee (Plate IX, right).

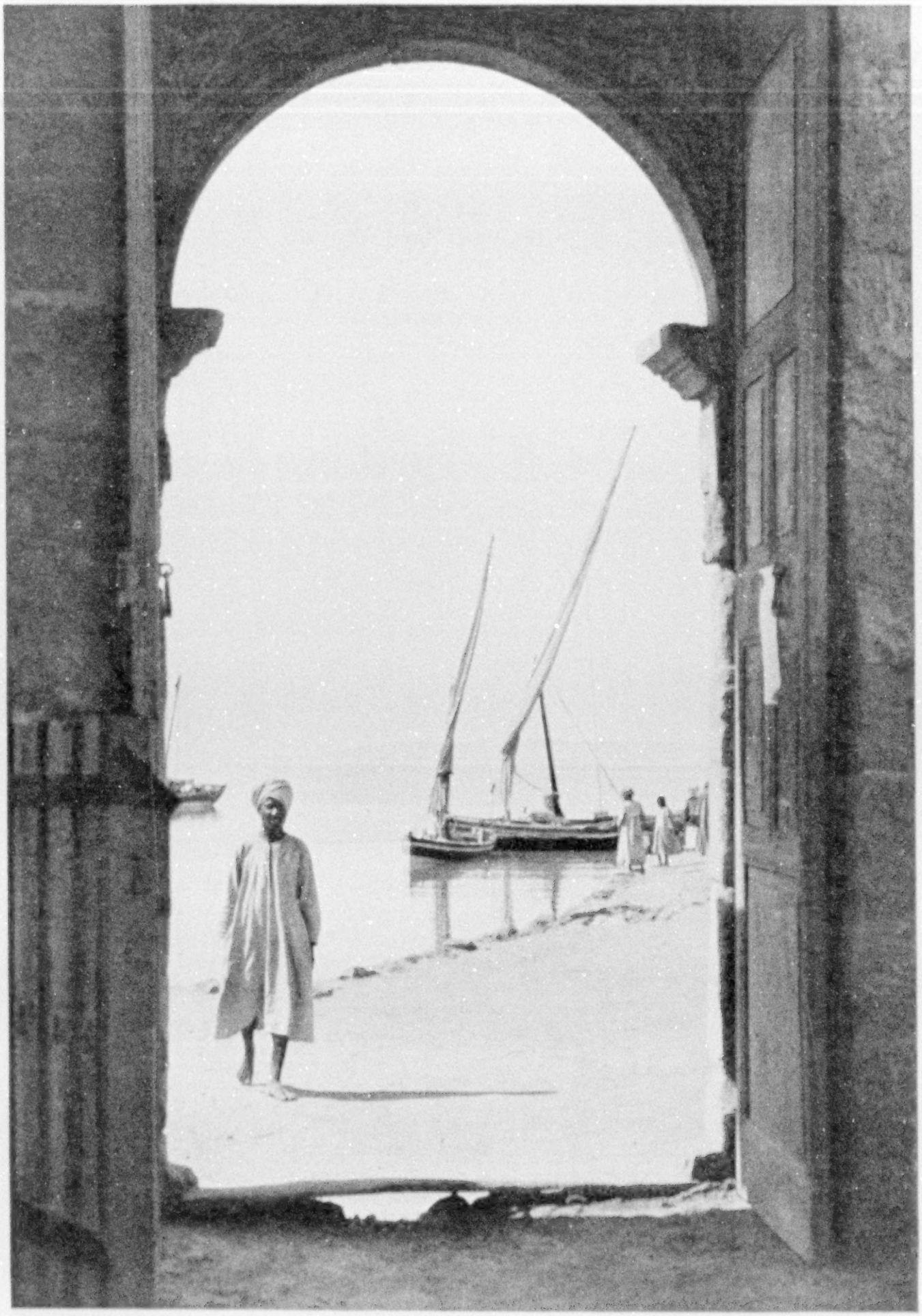
The flamboyant colors of Turkestan add vividness to Jerusalem. Both Moslems and Jews wear the posterlike robes that make a trip through central Asia a never-to-be-forgotten experience. The director of one of the hostels for central Asian Moslems favored me with a sitting (Plate X) and a group of Jewish refugees, once wealthy, now poor, posed for me in the rich raiment to which they were accustomed in former days (Plates XVII, XXIII, and XXIV).

Back and forth across the courtyard ran a young girl, who begged me to take her picture. "I'll make myself beautiful," she said in what then seemed an excess of faith. But from the common stock of those Jewish refugees from Bokhara she borrowed a radiant robe and assumed a confident air (Plate XVIII).

Panoply plays a part in oriental politics and the kavass, a perambulant badge of office, is attached to high officials as bodyguard or personal messenger. The scarlet and gold of the kavass of Lord Plumer, High Commissioner of Palestine, would in some towns start a riot rather than quell one, but amid the orgy of color in the Holy City even so striking a figure passes almost unnoticed (Plate XII, right).

In the East it is the old men and young women who appeal to the eye. Whether it be an Ashkenazic Jew in plush robes (Plate XIII, left), or one of the bright-turbaned patriarchs of Bethlehem (Plate XIII, right), male dignity adds to the composite into which a splash of color and sound is introduced by the lemonade seller (Plate XIX).

Every visitor to the Holy City covets a record of the colorful costumes which oriental women wear so gracefully (Plates XII, left, and XIV), but it was a rare privilege to have as models in the Temple area (Plate XV) and at the Tombs of the Kings (Plate XVI) a well-bred Moslem mother of Bethlehem and her eighteen-year-old daughter, who braved the camera as a gesture of friendship toward members of the National Geographic Society.



PORTAL, FROM SEA TO SINAI AT TOR

The camel transport for visitors to the Sinai Peninsula is in the hands of the Greek monks. This entrance to the Greek convent at Tor is the portal separating the dhows of the Gulf of Suez from the shuffle-footed ships of the desert that carried the author's caravan to Mount Sinai and north to Suez, in the reverse direction, along the trail of the Israelites.

EAST OF SUEZ TO THE MOUNT OF THE DECALOGUE

Following the Trail Over Which Moses Led the Israelites From the Slave-Pens of Egypt to Sinai

By Maynard Owen Williams

Author of "Through the Heart of Hindustan," "At the Tomb of Tutankhamen," "Syria, Land Link of History's Chain," etc., etc., in the National Geographic Magazine

With Illustrations from Photographs by the Author

THE little steamer from Suez reached Tor at dawn and dropped us into a snub-nosed dhow, where our impedimenta rose to a proud peak in a chesty turkey gobbler whom we christened "The Last Days of Pompeii."

Tor is a pilgrim port and quarantine station, about which the Mecca pilgrimage, rubbing the Aladdin's lamp of religious holiday, conjures up a magic city of mat shelters.

Orthodox pilgrims from Russia seldom visit Sinai now, but the Greek priests have a monopoly on the Sinai transport and the infrequent traveler is fought for by four tribes, to each of which the camel hire comes as a godsend, transmitted by the Church.

While we visited the school and inspected the dusty chapel, glowing within with golden saints, our dragoman and a monk were threshing surplus noise and volubility from our caravan.

Torn between covetousness and the Arab reluctance to see his camel bear an ounce more than another's, the drivers were beside themselves.

But gradually the babel tired itself out and order emerged. One after another the grumbling baggage camels dropped rheumatically to earth.

At 11 o'clock we were off! It was a propitious start. Only four hours had been spent in the mutual revilement of religions and ancestors; our baggage camels for five people numbered only 32; and there was a light breeze.

Four tents lined with bright Egyptian patchwork so fine that it resembled embroidery; comfortable iron beds with spotless linen; bottled water from beside the Lake of Geneva; tea from Darjeeling; coffee from Mocha; shortbread from Scotland; as we saw the greatness of our possessions we felt sorry for the Children of Israel.

Before the day was over we felt less sorry, but sympathized more. The sand, symbol of freedom, is the stern jailer of man and mount. In choosing the camel as our beast of burden and the Turi Arab as our guide, we bound ourselves to the age-old life of the nomad—a narrowly restricted existence reflecting that of those who wandered through Sinai on their way from the slave-pens of Egypt to the Promised Land.

THE DESERT IS A BACKGROUND FOR MAJESTIC BEAUTY

Yet, because it is projected on this dun screen, many a scene takes on rare beauty. Thrown up against that vacuity induced by sterile sands and slumber-footed steeds, impressions have a startling freshness.

The artist sketched on neutral-tinted sandpaper, upon which his bright pastels left deeper and more vivid strokes than on a smoother medium. The drab desert is the rough background for beauty too majestic to describe, too subtle to share.

But why put on airs at being so favored? It might as well be admitted that the high-water mark of the day's experience was when, the long ride done, we sat over smoking teacups and the lady, quaffing the scalding drink in an ardent, succulent way that a tea-taster would envy, smacked her cold-creamed lips and exulted, "Fellows, but that's good!"

In the desert, drinking eclipsed in interest all forms of eating, including that feast in the Monastery of St. Catherine, vegetarian retreat, at which "The Last

ALL ABOARD FOR THE DESERT! BEFORE THE START FROM TOR

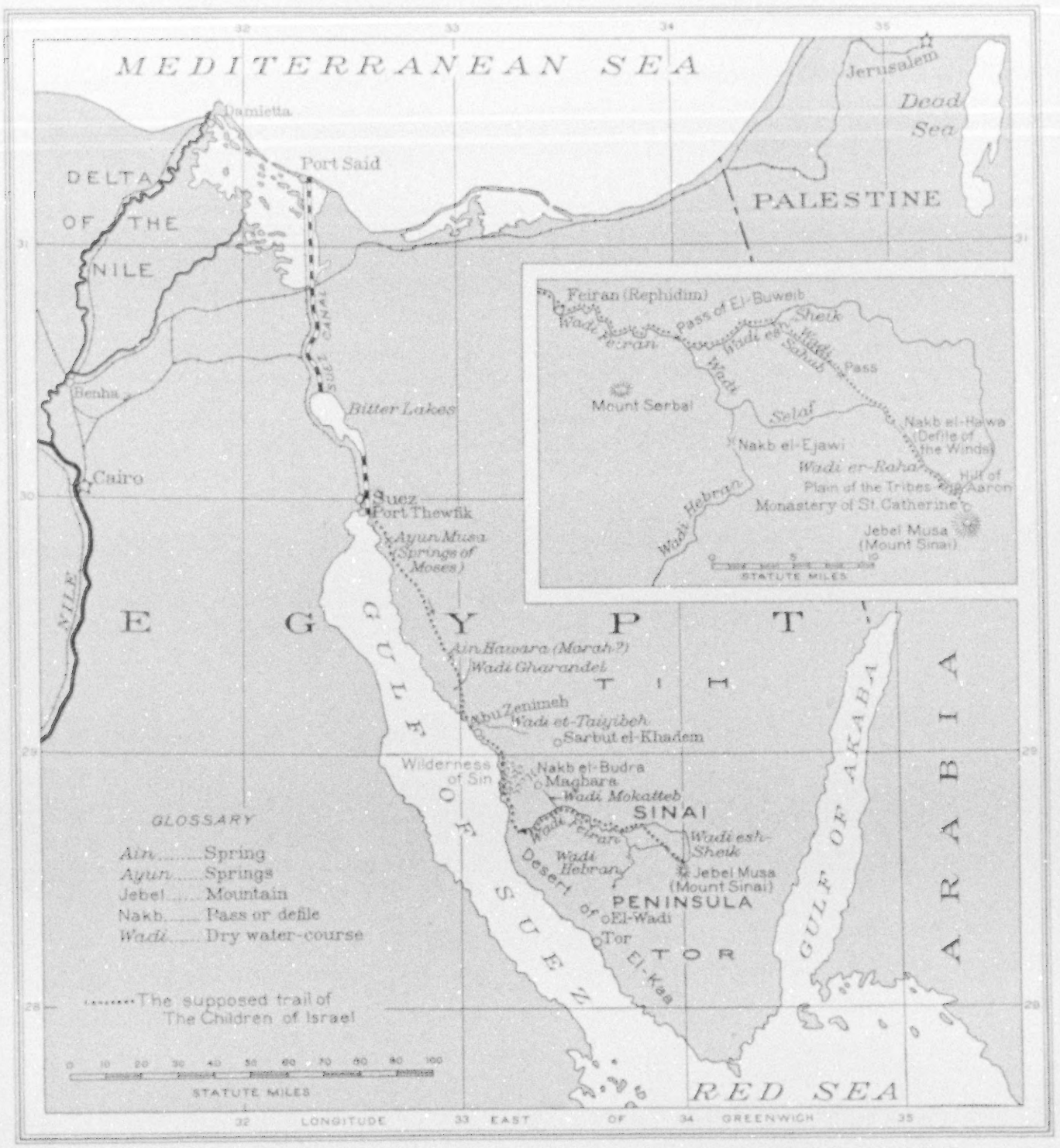
First, there is an agreement as to the total number of camels, in this case only 37, including the mounts for the five travelers. Then comes the apportionment of tents, beds, chairs, food, water, live chickens, and the turkey gobbler, christened "The Last Days of Pompeii." Each traveler carries his personal baggage on his riding camel.

THE FIRST NIGHT'S CAMP IN THE DESERT OF EL-KAA

In the background are the serrated sandstone peaks of the heart of the Sinai Peninsula, with the mass of Jebel Serbal in the distance. The Arabs are traditionally expert at tent folding and silently stealing away, but it takes vociferous direction to induce them to prepare the night's shelter.

A TRICKLE OF BRACKISH WATER BREAKS THE BARRENNESS OF THE WADI HEBRAN

Part of the author's caravan climbing the ovenlike Wadi Hebran on the morning of the second day. Before noon, with its breathless heat, the party had passed this relatively luxuriant part of the stifling granite gorge. In such a "weary land" the "shadow of a rock" is a blessed relief.



Drawn by A. H. Bumstead

A MAP OF THE SINAI PENINSULA

Following in general the route of the Children of Israel in their flight from Egypt to the Promised Land, the author traveled by camel caravan from the shores of the Red Sea to the Mount of the Decalogue (also called Mount Sinai, Mount of the Ten Commandments, Mount of the Law, and Jebel Musa—Arabic for Mount Moses), and thence to Suez.

Days of Pompeii," breast up and brown, with gaily colored lace paper pantalettes on his meaty legs, held the center of the stage.

It was the afternoon tea which inspired the first verse of our marching song:

"Oh, we're waddling through a wadi,
With our camels in a string;
Full of tea and lemon toddy
And most every liquid thing."

The only license required in the desert is poetic.

Not far from Tor a fringe of palms stretched like a triumphal gateway to emptiness. To the north a tawny hill ended near a thick clump of palms where some of the monks, forbidden the light wine of the grape, distill strong drink from dates.

Soon we were opposite El-Wadi, a mud hamlet paralleling the salt-crusted course of a dried-up stream. Palms rose majestic above the hovels and two Arabs, straddling far back on the hind quarters of their young camels, came racing up at

Photograph by American Colony Photographers

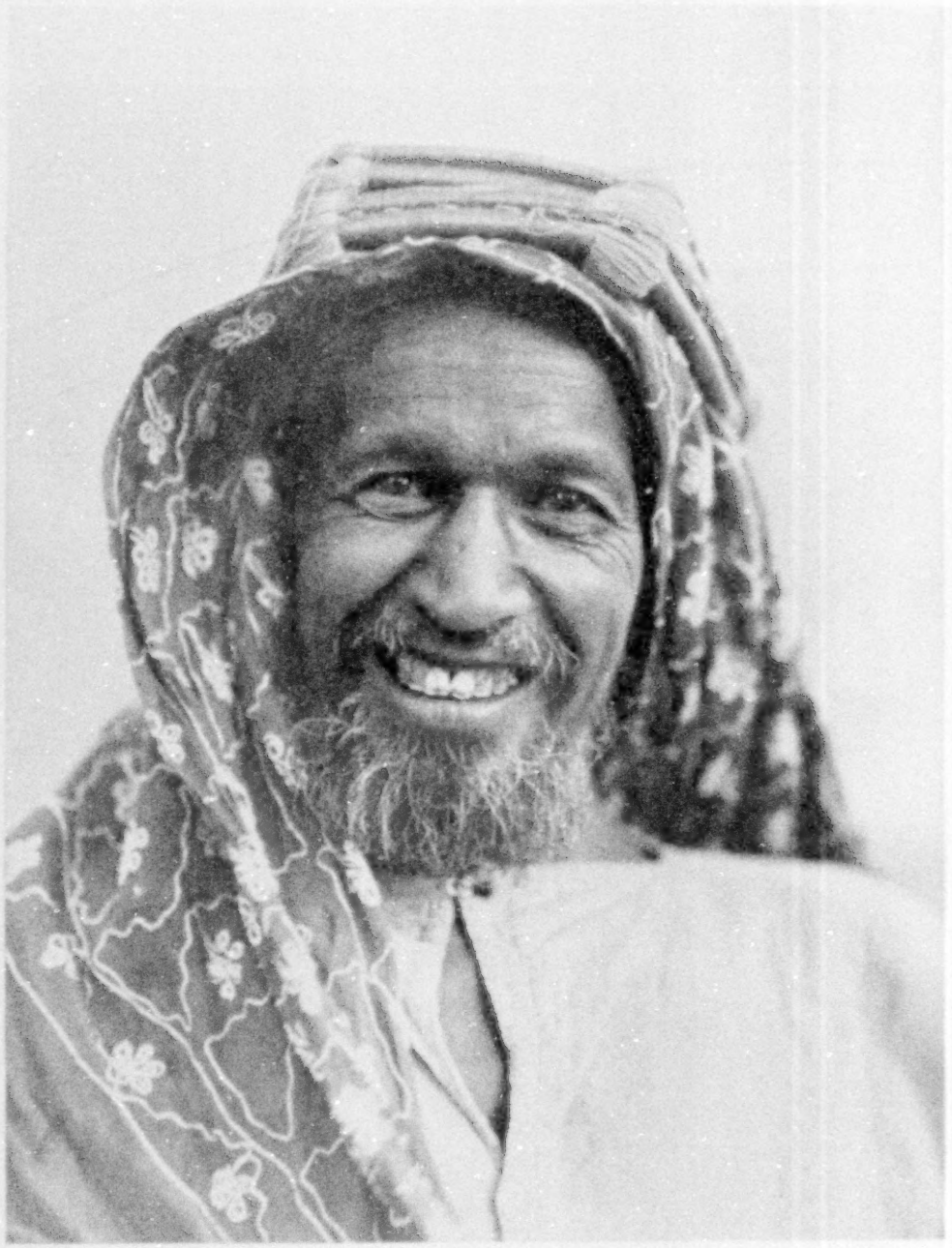
THE BEGINNING OF A SANDSTORM IN THE DESERT

Extremes of heat and cold, wide open spaces, narrow defiles which become superheated chimneys, dancing with heat waves, give rise at times to sandstorms, during which tiny pellets cut like knives. In most of Sinai the gravel desert prevents such destructive sandstorms as those of the Sahara.

Photograph by American Colony Photographers

DESERT LOVE BETWEEN AN ARAB AND HIS CAMEL

The Arab swears that such floppy lips as can grab a thorn bush without a puncture are really soft to the touch. Although camels roar and blubber, they seldom bite. They are capable of an awful kick.



A SHEIK OF THE DESERT

Always smiling, even during the fasting period of Ramadan, always ready to share his coffee, this cameleer is a highly respected leader in his tribe.

AN ABSTEMIOUS SON OF ISHMAEL AT LUNCH

A goatskin of water, a handful of dates or thorn apples tied into a corner of his cloak, some coarse bread, and a pinch of high-power tobacco constitute a sumptuous lunch for a desert dweller. On the arduous second day of the author's pilgrimage, which was during Ramadan, not one of the Moslem cameleers broke his fast until nightfall.

a speed that shamed our arrogant but slow-paced mounts.

That first afternoon our leader, whose enthusiasm was always betraying him into enviable ecstasy, proclaimed, "I may sing another song to-morrow, but I will say now that a camel is a comfortable mount."

CRAWLING TO THE STONY CORE OF SINAI

He and the artist changed camels several times during our 11 days in the saddle. Always during their first hour on a fresh steed they were in Paradise. Second thoughts were soberer. Yet never did they lose faith that a camel can be a steed worthy of an enthusiast.

Night came before we entered the Wadi Hebran and our ride had been too short to test or prove us. Vestiges of the outside world still clung to our senses. The desert had not yet made us its own. That miracle was reserved for the morrow.

Long after our trip to Sinai was over, we referred with awe to "that second day."

It began before dawn in the desert of El-Kaa. By mid-morning we were crawling up a stifling granite gorge leading to the stony core of Sinai. At midday we reached the longed-for shadow of a rock, the only one in that whole toilsome trail, and found it tenanted (see page 712).

We spent our nooning huddled in the sparse shade of a single *shittim* tree, our thick pith helmets warding off the savage sun, then sweated up the crooked Nakb el-Ejawi, too steep to climb on camel back and so narrow that our saddlebags sometimes brushed the rugged walls.

Shortly before sunset, from a watershed near Mount Serbal, we glimpsed our four white tents opening out like huge umbrellas in the Wadi Selaf. The promise of hot tea caused us to hurry down, although interesting stone huts, or *nawamis*, rose beside our trail.

AN OASIS AMID THE MAZE OF GRANITE HILLS: WADI FEIRAN

In the background is Mount Serbal, one of the many peaks that make the Sinai Peninsula a wildly tossed sea of stone rising to Jebel Catherine, 8,551 feet high. Wadi Feiran, the "Pearl of Sinai," is the supposed site of Rephidim, where Moses's hosts fought the Amalekites (p. 737).

After that day, which became notorious, the night was transcendent. There in the Wadi Selaf the fearsome wilderness became a gentle mother spirit, lulling our minds and bodies to that leisurely wakefulness which is better than sleep. Tomorrow we would rest at the foot of the Mount of the Lord.

The artist played a one-octave harmonica bought in Suez and in the barren wilderness we sang the songs of home.

Spaced at irregular intervals about the valley floor were the four campfires of our Arabs, each tribe by itself. With sunset came the end of Ramadan. All day our men had tramped or ridden, waiting for the moment that would end their month of fasting. The sun had long since left the valley floor when the head sheik came to ask if the day was done.

THE ARABS BREAK THEIR FAST

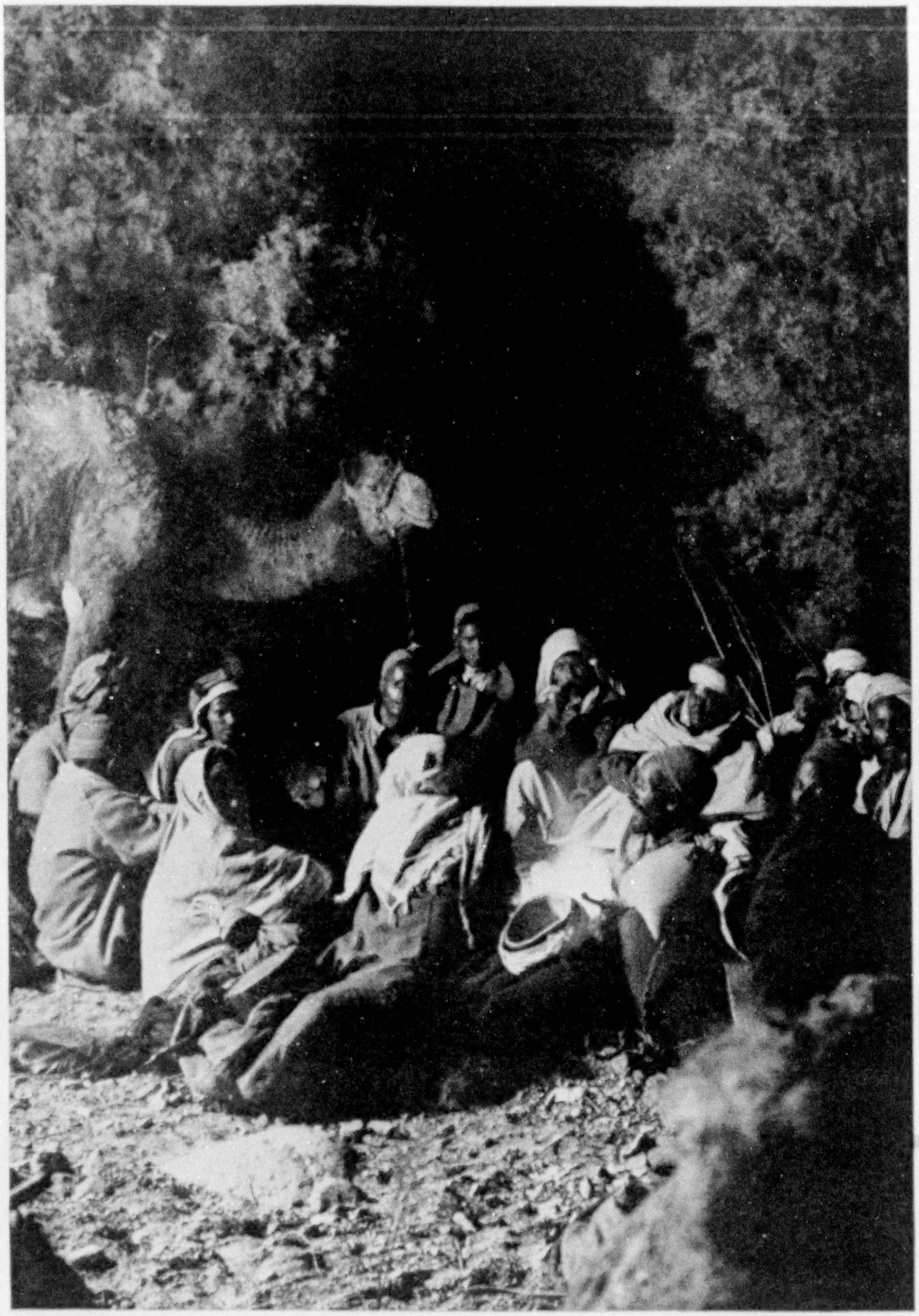
The strict Moslem will not take advantage of the shadow of a mountain mass. He must know that the sun has really set. Expecting great rejoicing, I looked at my watch and assured our Arabs that the day, and with it Ramadan, was truly past.

"Praise be to Allah the Merciful," was the reply from lips that had not touched food or drink that day and around four campfires our gift of coffee was poured out into tiny cups and solemnly passed around the circle of dark, sweaty faces lighted by blazing brushwood fires.

About each group the camels, flat on calloused keels, were noisily munching field beans spread on the cloaks of their masters. The flickering firelight cast into high relief the ugly, haughty heads or laid a silver line of light along the upper curve of silhouetted necks and humps.

Clumps of juniper bushes showed silver gray against the charcoal night that shut the campfires in, but overhead the sky was royal blue and on its velvet background Orion's sparkling belt dipped toward the craggy mass of Mount Serbal.

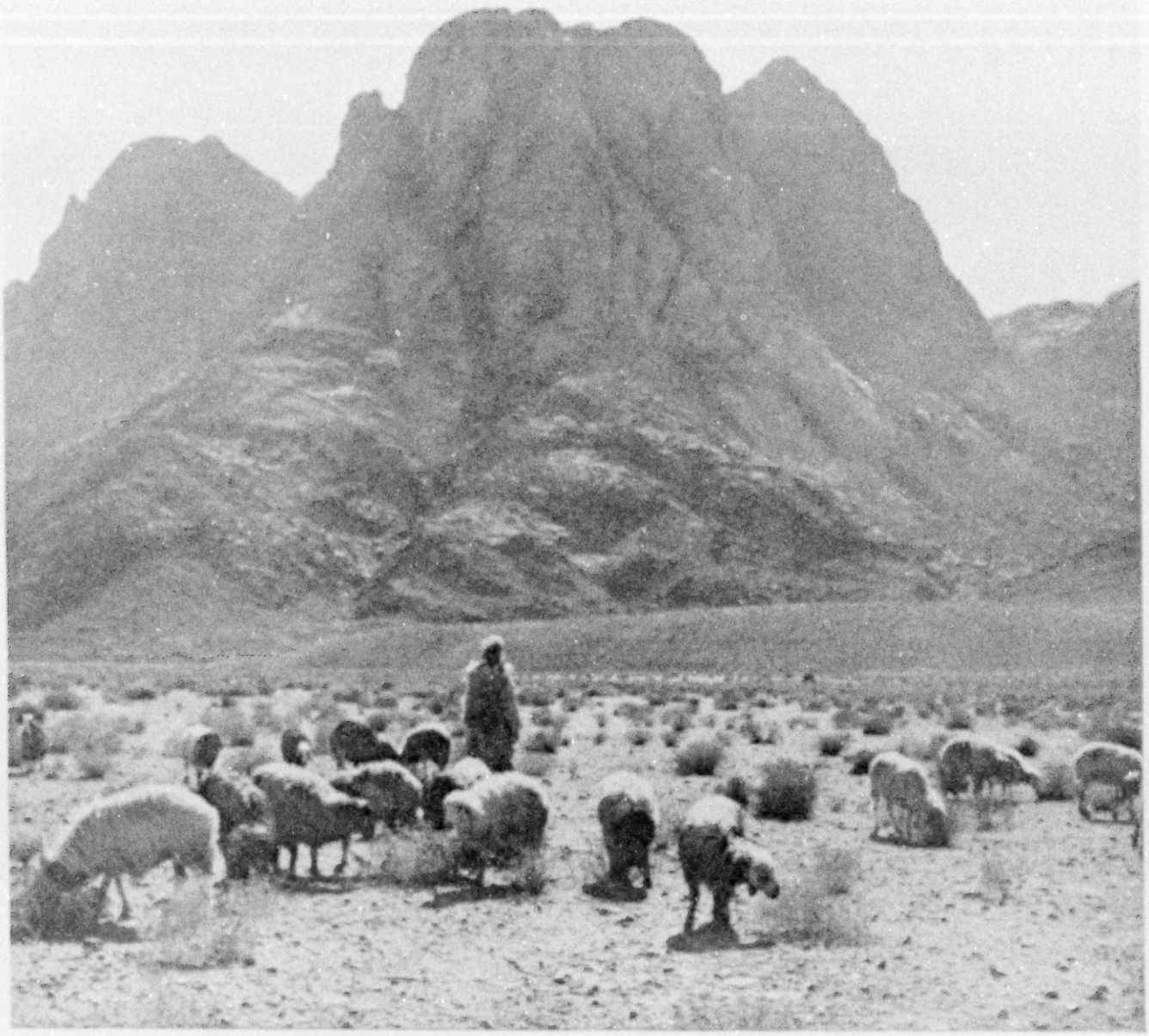
Standing stark in the firelight, a white-gowned figure called on the name of Allah and from the distance came a soft, quavering piping that awakened long-dormant memories of black tents and starry



Photograph by American Colony Photographers

SOCIAL CLUB OF THE DESERT DWELLER: THE EVENING CAMP FIRE

The Arab depends as much on the camp fire for his sociability as for his food and drink. Coffee is first prepared; then rice in a copper vessel without handles and desert bread baked in a skillet with live coals on top of the loaf of what amounts to spoon bread. After the simple meal is eaten, the Arabs, one by one, forming a circle around the dying embers, talk in subdued voices for hours, then wrap their cloaks about their heads and sleep under the clear, cool sky.



Photograph by American Colony Photographers

THE MOUNT OF THE LAW AS SEEN FROM THE PLAIN OF THE TRIBES

Ras es-Safsaf, the northwestern face of Jebel Musa, 6,540 feet high, was probably the part of Jebel Musa from which the Proclamation of the Law was made to the people. The central portion suggests the Liberty Bell with a crack in the left side. The illusion becomes even plainer when one is nearer (see text, page 723).

skies in Transjordania before the World War. After the fierceness of the day, the wastes were wooing us, patiently, quietly, and with that mystic fascination which is an oriental attribute.

That second day tore us from our conventional background and galled and punished us, but brought the keen impressions which we sought. And while the fervid sands gasped in the cool night air, we understood how the Children of Israel, sorely tried and complaining by day, still kept alight the torch of awakening monotheism under the sublime splendor of the desert night.

Although we did not know it then, our hardest day was past and fatigue was followed by elation that we were making this pilgrimage in the age-old way.

THE ISRAELITES USED SINAI'S WADIES AS HIGHWAYS

Automobiles have recently scurried in flocks to the fortress-monastery of St. Catherine, carrying frock-coated officials to this far retreat. Over a part of our route our supercilious steeds waddled on at 20 miles a day beside the wheel ruts or rabbit-wire pathways of motor cars. Saddle-sore or not, we exulted every time

THE MONASTERY OF ST. CATHERINE FROM THE PILGRIM STEPS LEADING UP MOUNT SINAI

As one climbs the rock stairway to the summit of the Mount of the Decalogue and looks down on the fortress-monastery from a spot near the Chapel of Mary, it seems a mere dot amid the granite peaks that surround it.

we sensed our freedom from this parvenu, intruding in wadies down which the caravans of old crawled at the same pace as ours.

A wadi is road or river, the stony bed through which, on rare occasions, torrential floods pour down. Steep slopes close in the Wadi Selaf and a man could sprint across it, yet in 1867 forty persons were drowned in a sudden flood which turned the arid expanse into a seething torrent. On the granite ridges no vegetation serves to stem the flow or to retain needed moisture.

The wadies of Sinai to-day can differ little from those 32 centuries ago which served as highways for the Israelites. The granite heart of that rocky wedge between Egypt and Arabia seems too arid, too adamantine, ever to have supported forests or even occasional trees. Yet where there is water, vine and almond, ink-black cypress and silver olive grow luxuriantly. And jutting out from bleak rock walls, wherever there is the trickle of a perennial spring, palms thrust their fronded heads on high and their insidious roots split ancient rocks in two.

With Mount Sinai only a few hours away, our third day dawned glorious.

FORTRESS, MONASTERY, AND OASIS AT THE FOOT OF THE MOUNT OF THE DECALOGUE

The four tents of the caravan are set up in the outer courtyard, but the author's party was entertained inside the Monastery of St. Catherine. Behind the monastery the path leading to the pilgrims' staircase can be seen zigzagging up the granite slopes (see, also, opposite page).

There was a sharp tingle in the air, but the sun glowed warm. Range after range of rock, veiled in gossamer haze, closed the valley's end. My camel was brought up late and well it was, for that first hour was too precious to share with a company

When one goes to Sinai he should make sure, as I did, that his companions are chosen people. The leader, a famous preacher-author, was a constant inspiration and delightful friend. His lady, gracious companion of our wanderings, proved the best fellow of us all. The linguist, understanding the language of rock and tree and Arab, reaped wisdom in the midst of sterile scenes. The artist caught and recorded those glories of color which only the trained eye can see.

THE CAMEL HAS BUT ONE SPEED

Four choicer friends no wanderer in the desert ever had. Yet on that glorious morning I was glad to be alone. The lone hours with twilight fringes are the gold one rescues from the dross of desert days.

The camel is a tantalizing mount with only one speed—low. The calendar becomes a tyrant, forcing one doggedly on. What daybreak promises as pleasure, afternoon heat proves to be a daily stint wielding a taskmaster's whip as harsh as Pharaoh's.

Stern dignity, awe and barrenness are the features of this time-tumbled landscape, whose occasional oases, tufted with palms and sequined with tiny pools, only accentuate the arid immensity of naked rock and burning sand.

So in the days of old. Sinai was a place to escape from, a trial to be endured. How often did the Israelites yearn for the flesh pots of Egypt! How often did Moses find his Chosen People a "stiff-necked people"! One mighty milestone on their march was called "Complaint."

Amid this aridity the Arabs take on a

JOURNEY'S END FOR MANY A VISITOR TO SINAI

Permission to enter or reside in the Monastery of St. Catherine must be obtained from the Archbishop of Sinai, in Cairo. Other letters of introduction are useless. More than one distinguished visitor has been halted at this doorway, so narrow and heavily barred that a squad of sappers would have difficulty in forcing it. At sunset it is closed and barred for the night.

pleasing grace. The austerity of their faces is tempered by the cheer of their comradeship. Cotton-gowned, barefooted or sandaled with bits of cast-off tire casing, with a few dates or thorn apples knotted into the ends of their flowing sleeves; wearing a useless sword slung from one shoulder strap and an empty wallet from the other, they have a social grace that shames their sweating masters. Their nightly blessing as I left their campfires was a benediction which canceled the discomforts of the day.

ARAB AND CAMEL, DUNE AND SUNSET PRAYER, MAKE ROMANCE

Their care of their camels is admirable. None but an Arab can forgive these bumptious beasts for being such babies. The men scamper aside, gathering armfuls of coarse plants which assume the beauty of bouquets in the crooks of their arms. And as they stride along, they pass back food to their helpless, childish animals which look so old and proud and wise.

However long the camel can go without a drink, he eats at every opportunity. He kneels under protest, has the joints of a rheumatic, roars, blubbers and wails at the slightest suggestion of stern duty and is incapable of such real spirit as a horse or dog. Yet the long-cloaked Arab will take this comic beast, combine it with a sand dune and a sunset prayer and make it as redolent of romance as a bluff-bowed square-rigger breasting stormy seas.

That morning the hills beside Wadi Selaf were a deep chocolate streaked with lighter brown, as though they had stood too long in a drug store window. Over the bronze shadows was a verdigris of vegetable growth so slight it seemed the blasting breath of afternoon must wither it forever.

Before 8 o'clock we passed ten black tents of the Towara Arabs, the first habitations we had seen since entering the granite labyrinth. Small boys came down to see us pass and older men exchanged greetings with ours, shaking some by the hand, embracing others and kissing them on both cheeks.

By mid-morning we left our baggage camels, which had to take the long detour by the Wadi esh-Sheik, and started to climb the Nakb el-Hawa, or Defile of the Winds. Tip-tilted between towering cliffs, this narrow pass is cluttered with titanic blocks of granite, amid which the ever-ascending trail persistently noses its way.

Like a lesser Khyber Pass, free from the taming influence of curving roads, this bowlder-filled defile commands respect.

Before noon we stopped for luncheon and to rest at a charming spot where two large palms rose above the perennial spring at which we drank and soused our heads. Then higher still, with the reddest of the granite hills, Asiatic cousins of Syene, saw-toothing the unbelievable blue.

THE MOUNT OF THE LAW IS THE NOBLEST PEAK OF ALL

The great event of the trip is reserved for the time when, climbing up from behind the upper rim of the Wadi er-Raha, and looking down a perfect perspective between the flanking granite slopes, one sees before him the Mount of the Decalogue (Jebel Musa), one peak among many, but the noblest of all.

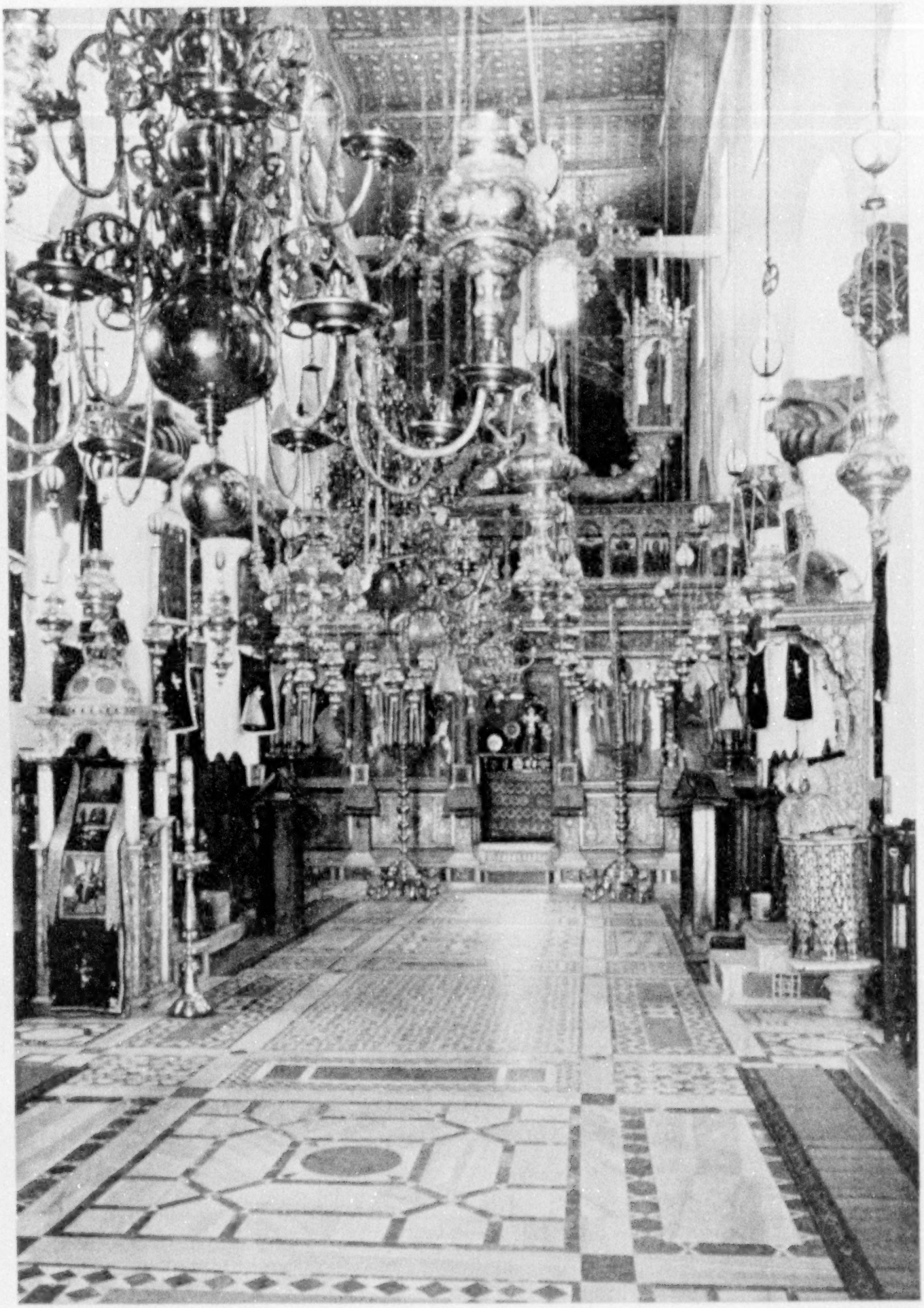
Coming upon it thus, one feels that it must be the Mount of the Law. It fits the Bible narrative as does no other peak (Exodus XIX and XX).

Reddish brown, but changing its tone under varying lights, this mighty monument is memorable for mass. It draws the eye. Alone in its impressiveness, it stands at the end of the Plain of the Tribes, sobering, awe-inspiring and sublime (see illustration, page 734).

From a distance its summit is split into three rock masses sloping slightly from the narrow crag at the right to the more rounded summit overlooking the Hill of Aaron, petty altar for the Golden Calf.

But as one rides down that vast parade ground in which the hosts of Israel camped, the central façade of the mountain lifts itself above and away from the two lesser masses which sustain it—as Aaron and Hur upheld the arms of Moses at Rephidim—and takes the form of a mountainous, cracked Liberty Bell, resting silent on the valley floor, now that its mighty work is done.

The shelter of the monastery and its mystery beckoned us on. How potent is



GLITTERING DISPLAY IN AN OBSCURE RETREAT IN THE STONY HEART OF SINAI

Tessellated floor, brocades and velvets, sculptured marble tinted with paint and time, tortoise-shell and mother-of-pearl, age-mellowed pictures on an ornate altar screen, an inverted forest of gift lamps—all the interior of the quiet Church of the Transfiguration in the Monastery of St. Catherine lacks is simplicity (see, also, text, page 727).

PRICELESS RELICS GUARDED WITHIN THE WALLS OF A FORTRESS MONASTERY

Priests of Sinai, wearing rich robes of gold brocade, carrying sacred books bound in velvet, enamel, and gold, wander through the mazelike, covered passages of the three-dimensional village inside the forbidding walls of the desert-girt retreat.

the lure of a long-anticipated goal! But I stopped there in that mighty plain and feasted my eyes on one of the most satisfying mountain views I have ever seen.

SACRED HISTORY CLOTHES JEBEL MUSA

Jebel Musa is worthy of the theme with which sacred history has clothed its naked sides. One wrinkled mass of enduring granite, it makes one wonder how the Chosen People could have stooped beneath its solemn gaze to worship the pagan calf.

My halt in the Plain of the Tribes saved me from wondering whether our letter of introduction would be honored, and I entered the exclusive inclosure with regrettable ease. Better men than I have been refused admission after reaching the monastery gates.

One squeezes in through small, iron-studded doors designed to repel rather than welcome. The monastery has not lost its primary aspect of fortress, and not only is access attained through a cramped and crooked corridor, but on its walls are cannon, ranging from imposing antiques to the one-hand variety which formerly prevented the Glorious Fourth from being either safe or sane (see page 730).

In going to the guest chambers which, contrary to report, are both comfortable and clean, one passes a mosque which seems more out of place in a Christian monastery than do decrepit cannon. In the region of Jebel Musa there live a few score Jebeliyeh—Mountaineers—who have more or less platonically embraced Islam. The mosque is supposed to serve them.

Before lying down, these retainers make a sign of the cross. At a circumcision ceremony, the leader has a knife in one hand and a cross in the other. In their religious processions the cross is carried, and it sometimes stands upon the headstones of their graves.

But, cross or no cross, these descendants of Wallachian and Egyptian slaves serve to rationalize the mosque, now that

AT THE HOLY DOOR IN THE ALTAR SCREEN OF THE ORTHODOX CHURCH: SINAI

In Greek churches the main audience chamber, or nave, terminates at the altar screen (iconostasis). Behind it is the bema, or sanctuary, with the holy table, or altar, in its center, in front of the apse. The bema is often divided into three chapels, the sanctuary proper being flanked by the table of prothesis, or credence table, and the diaconicon, which corresponds to the sacristy of a Western church. Of the three doors which often pierce the architectural screen, the center one, provided with a curtain, is the holy door. Old sacred paintings, ornately decorated and with parts covered by gold or silver plates, form a part of the iconostasis or are hung from it.

that equally humble structure has done its bit. Bombardment by the Moslems was imminent. The monks hurriedly raised a minaret beside the church tower. "Shoot if you must this Christian fort, but spare the mosque," was their retort. And it worked.

Under the mosque is an olive-oil mill on which the dust is three years deep, this being the first year in four that the olives in the monastery garden have budded. On a flat roof the unground grain spread out in the sun had some illegible blessing written on its surface, as a flattened bit of sand bears occult symbols of hope and fear traced by a fortune teller (p. 732).

A THREE-DIMENSIONAL VILLAGE WITHIN MONASTERY WALLS

There are only a score of monks in Sinai now instead of 400, and many of the old buildings have been torn down. Yet the inclosure seems packed as it is. Rickety stairways ascend from one shaky porch to another and archways carrying rooms over streets make this a three-dimensional village within monastery walls.

The church is below the average level and, lofty though it is within, gives the sense of being in a crypt. Back of the main apse is another, this double bulkhead of sanctity being divided into three small chapels which give the Christian visitor such a feeling as he usually associates with a mosque.

Thick rugs cover the floor and one is obliged to remove the shoes from his feet, as the spot on which he stands is holy ground. This is the Chapel of the Burning Bush and marks the spot where Moses, called by God, ceased being hired man for his father-in-law and became leader and lawgiver for his people.

Although this chapel seems to be added to the church, it is really the oldest part. Peacock-blue tiles surround the room, ornate lamps hang in such profusion that one must change position to see the overcrowded picture gallery of icons on the upper walls, and above the silver plate through which one is shown the root of a "burning bush" there is a fine half-dome of rich mosaic.

The evening of our arrival a lay brother led me through the pitch-dark vestibule into the Church of the Transfiguration, and to a dark pew, satin-polished by long use.

The darkness hung an invisible curtain between me and the one white-haired monk who slowly turned the crackling parchment pages of a sacred book, on which a soft light poured down from a single lamp. Then came a novice with a taper on a long pole, and as he shuffled from place to place in the gloom, one spot after another glowed or glittered with richness and gilt.

THE MONASTERY RETAINS ITS MYSTERY

Seen thus, the magnificent but crowded interior retains its mystery and does not reveal the clutter of rich lamps, ostrich-egg pendants, icons and all the bric-a-brac that accumulates even in a place of worship (see page 724).

The novice carried his spot of light along the intricately carved and decorated altar screen (see pages 726, 728).

Another ghostly attendant swung the gilt doors of the screen back into the void, in which some mystic disks of burnished silver shone. With a quiet, musical voice one monk started the service. Then another read some spirited passage full of staccato repetitions.

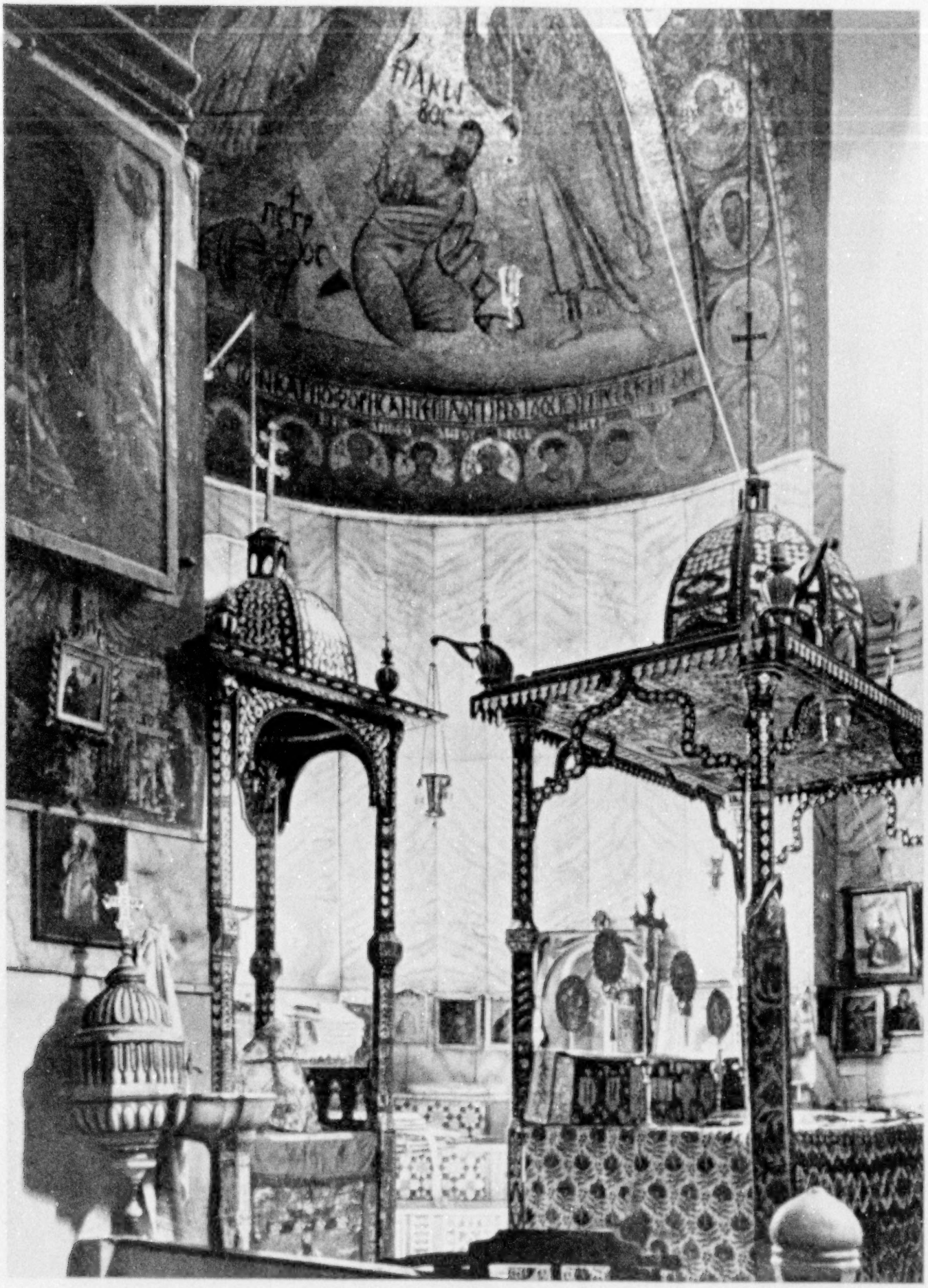
An old monk with a long white beard passed about the church, shaking acrid incense smoke from a clattering censer. And bent forward in a narrow pew, like a Chinese sedan chair, another graybeard, his patriarchal head bowed against the darkness of his robe, quietly snored. His bony fingers clutched the arm rests, polished by monkish hands which would long since have become dust were they not piled like seasoned cordwood in the gruesome crypt or charnel house below the dark cypresses in the monastery garden.

PRECIOUS RELIGIOUS DOCUMENTS HOUSED IN A FLIMSY STRUCTURE

Small bells rang. Beyond the altar screen occult things were happening. The reading and chanting under the lights in the body of the church were accompanied by mysterious activities back there beside the coffin of St. Catherine. It was with a sense of awaking from a dream that I stole out through the dark vestibule, found my way along the somber pathways

THE ORNATE ALTAR SCREEN OF THE CHURCH OF THE TRANSFIGURATION, IN THE MONASTERY OF ST. CATHERINE

Through the holy door can be seen the altar table in the sanctuary, with its brocade-decked high altar and its tortoise-shell and mother-of-pearl canopy, or ciborium (see, also, illustration, page 726).

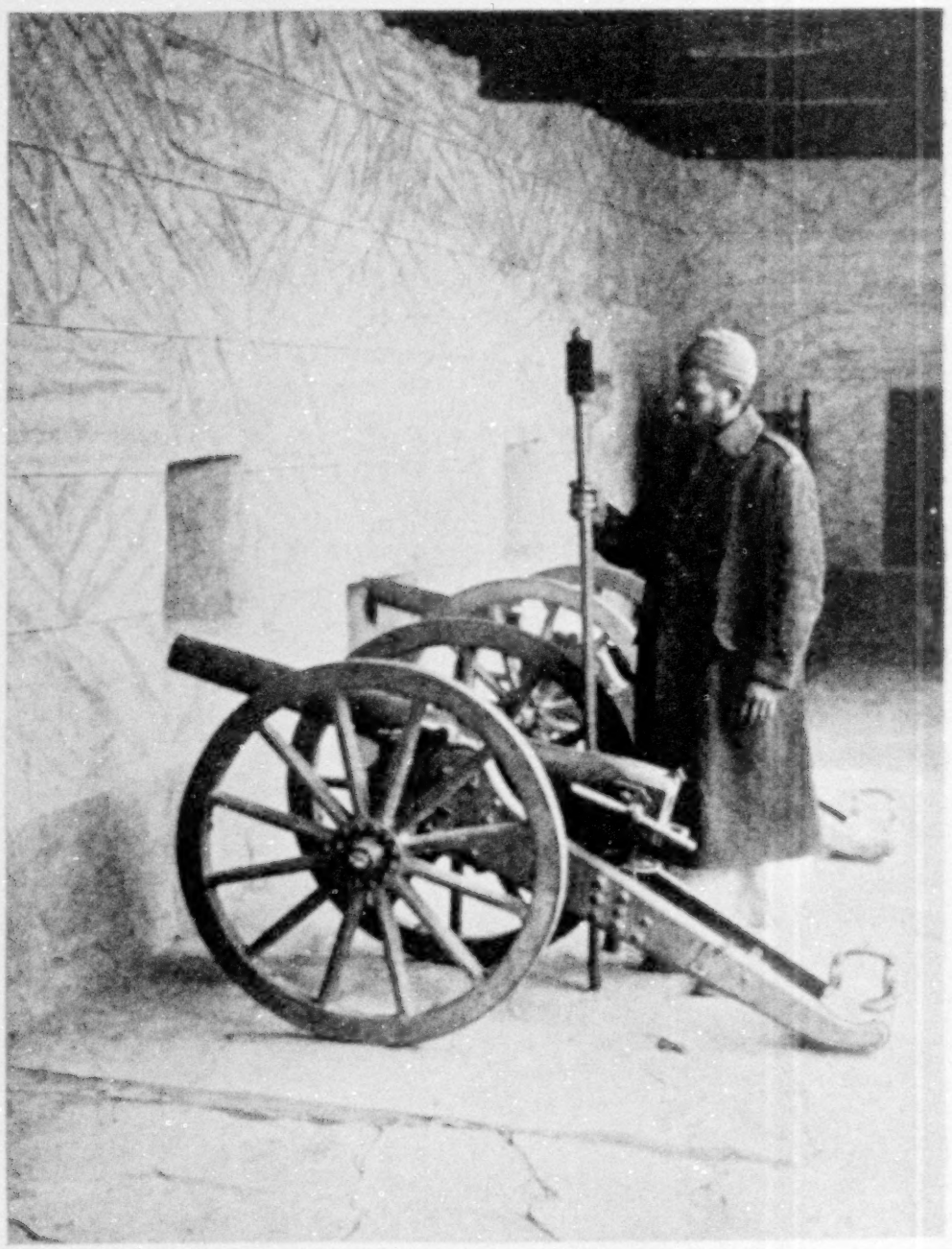


THE INNER SANCTUARY OF THE CHURCH OF THE TRANSFIGURATION, AT THE FOOT OF MOUNT SINAI

The mosaic in the half-dome of the apse shows the Transfiguration, in memory of which the church is named. Circular portraits of saints and prophets frame the central scene. At the right is the communion table.

A SHEIK OF THE TOWARA BEDOUINS

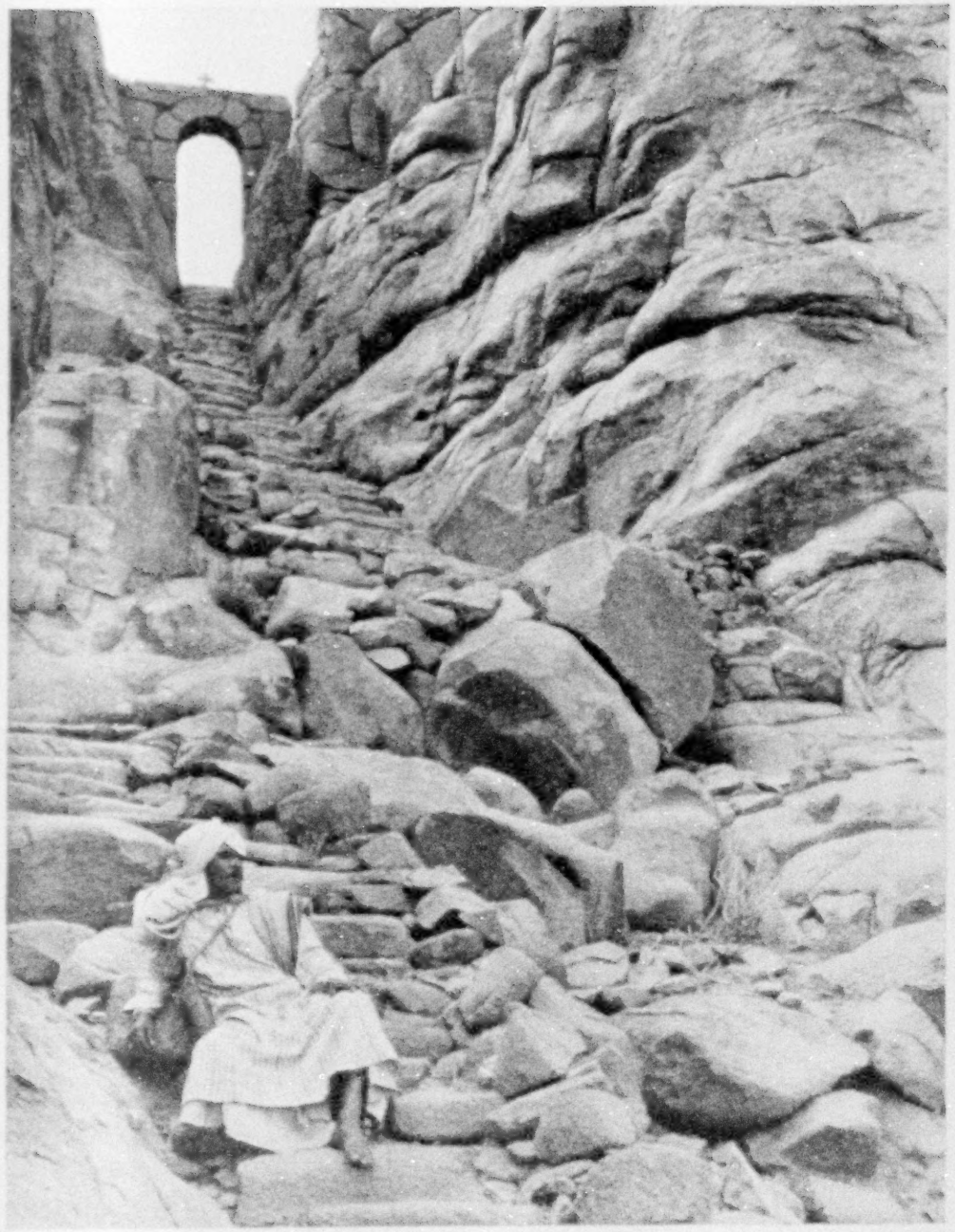
Note the snowy white turban in place of the flowing kaffiyeh and the chain attached to his pipe, which has on it a spear for cleaning the pipe bowl and a pair of tweezers, or small tongs, for lifting a live coal to his pipe. In Sinai to-day there are about 6,000 Arabs leading a precarious existence. Dr. Flinders Petrie, faced with the question of how 600,000 men ever lived in Sinai, explains that the word which has been translated "thousand" in Exodus XII, 37, should be translated "families."



CANNON IN THE MONASTERY OF ST. CATHERINE

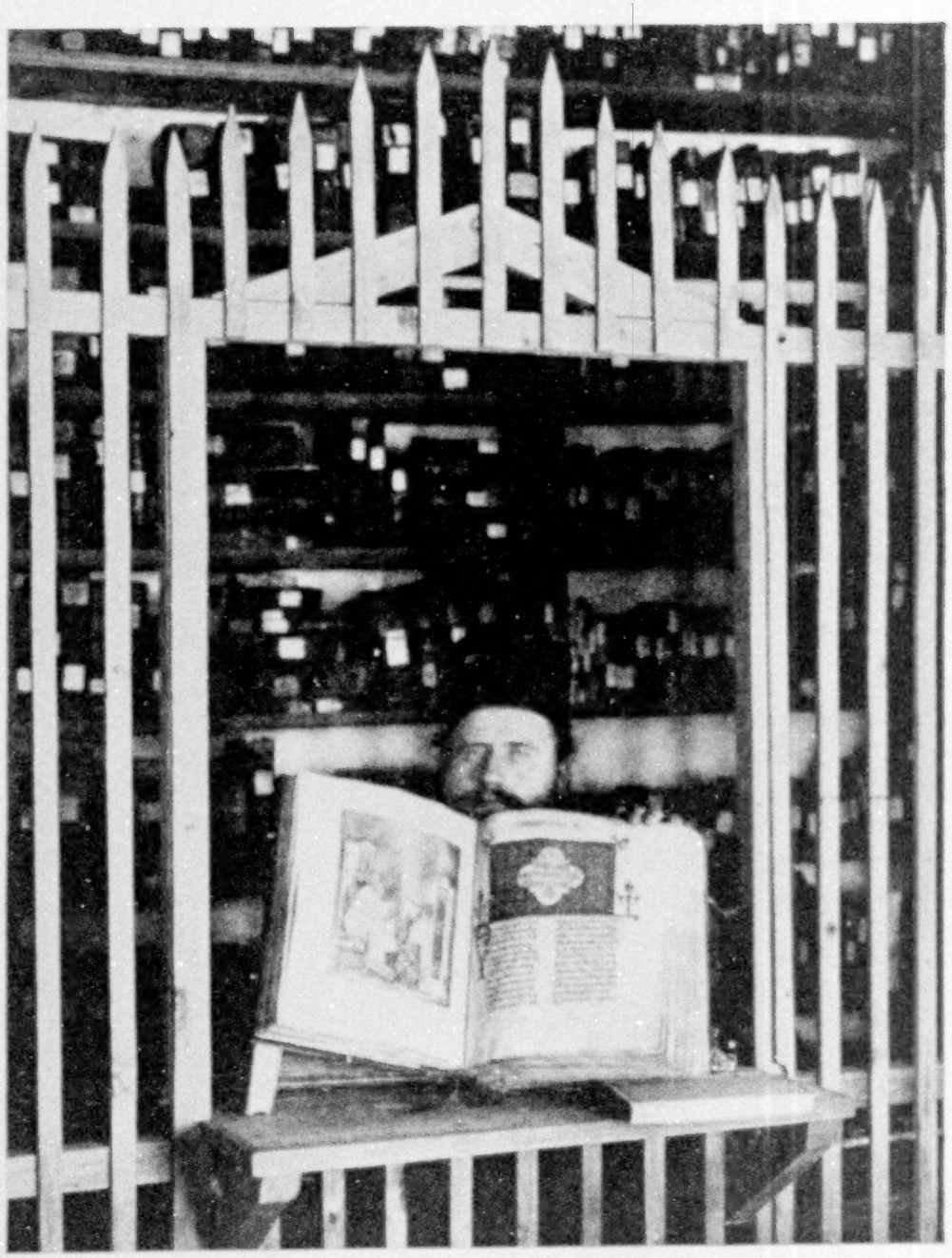
For miles around Mount Sinai, both mountaineers and Bedouin tribes are largely dependent on monastic bounty, so that these warlike relics have little meaning. Until recently visitors to the monastery were hauled up by windlass, and even to-day the gates are locked at sunset (see illustration on page 722). Other cannon at the Monastery of St. Catherine range from abandoned English mountain guns to toys incapable of warlike use.

Photographs by American Colony Photographers



THE PILGRIM STAIRWAY UP THE HOLY MOUNTAIN

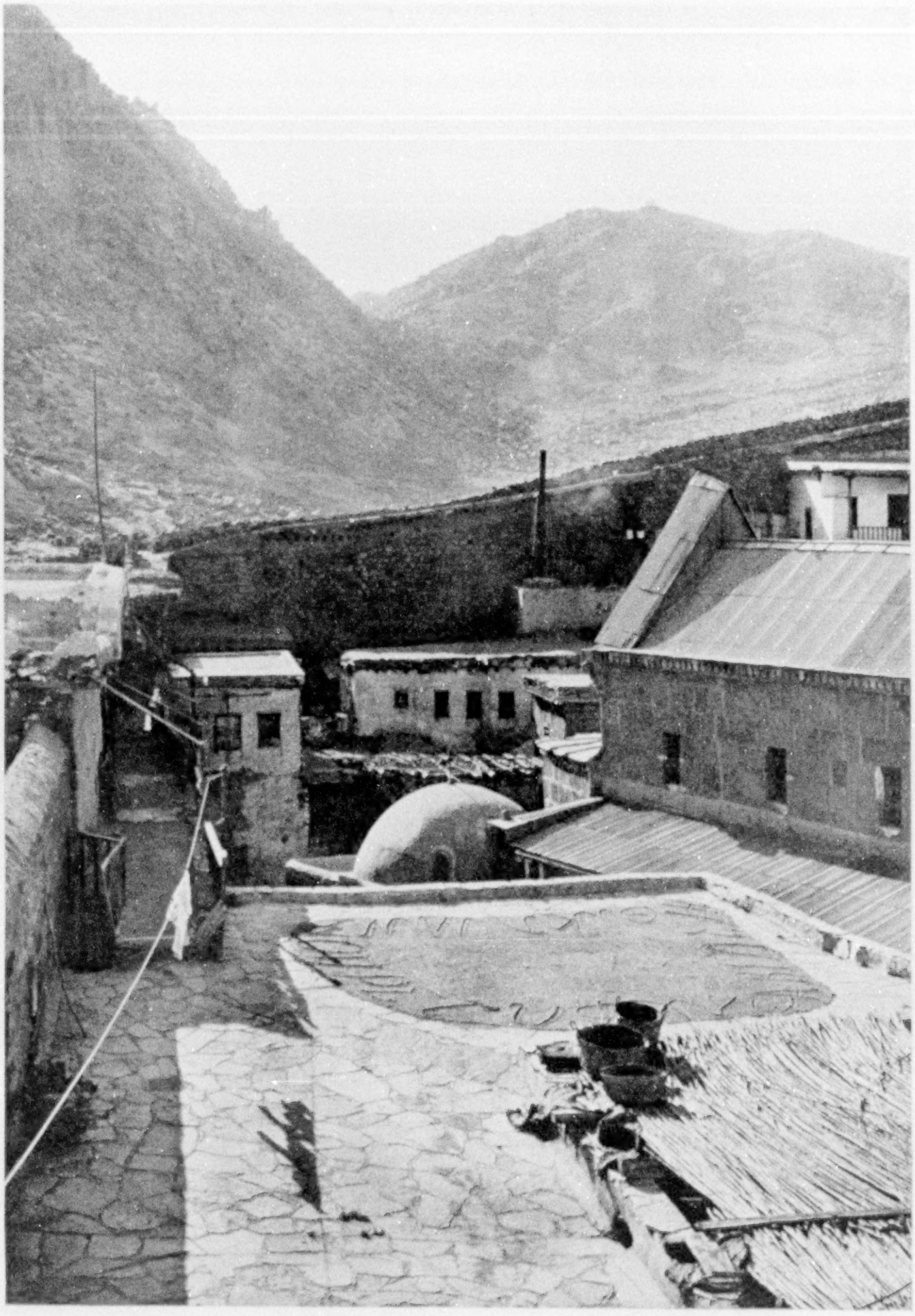
There are about 3,000 stairs in the 2,500-foot climb from the Monastery of St. Catherine to the top of Jebel Musa, the Mount of Moses. The path winds in and out among the granite bowlders and, although four hours are allotted to the ascent, it can be made by the pilgrim steps in two hours of strenuous climbing (see page 735).



Photograph by American Colony Photographers

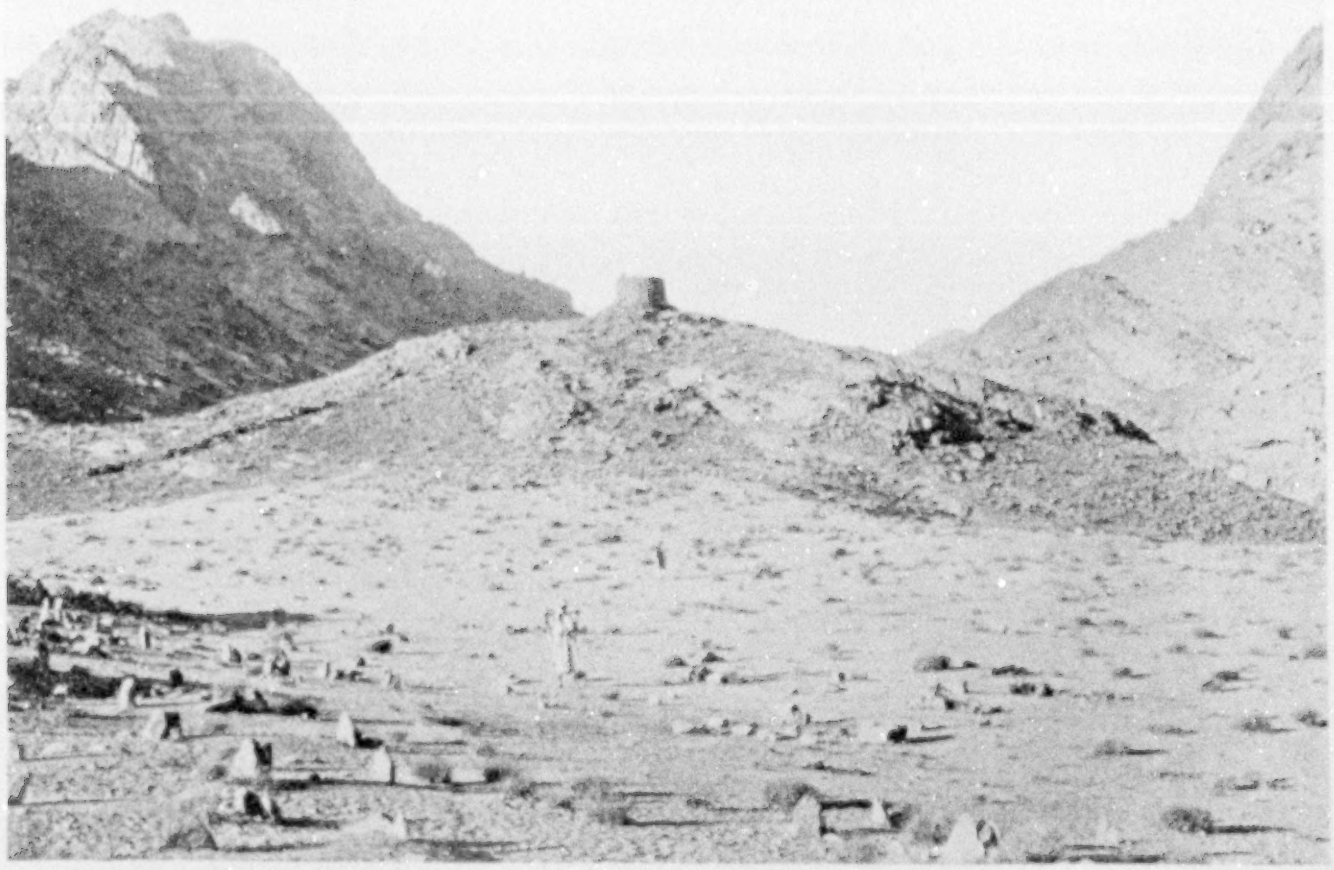
A TINDER-BOX LIBRARY FULL OF PRICELESS VOLUMES

In 1844 Tischendorf rescued from a rubbish heap at the Monastery of St. Catherine 43 pages of the famous *Codex Sinaiticus*. In this fourth century uncial manuscript of the Bible, the New Testament is complete. After 15 years of secrecy and negotiation, he secured the remainder, now the prize exhibit in the State Library in Leningrad (see text, page 733).



AN OCCULT BLESSING WRITTEN IN GRAIN DRYING ON THE ROOF OF THE MONASTERY OF ST. CATHERINE

Beyond the walls one looks up the Valley of Jethro toward the southeast. At the right is the ugly, corrugated iron roof protecting the ornate—almost garish—decorations of the Church of the Transfiguration, at the foot of Mount Sinai (see text, page 727).



Photograph by American Colony Photographers

HILL OF AARON: PETTY ALTAR FOR THE GOLDEN CALF

On this little hill the tribal men and women, at Aaron's direction, tore off their earrings to furnish gold for an idol, about which they sang and danced in open rebellion against their absent patriarch. And when Moses came nigh "he saw the calf, and the dancing: and Moses' anger waxed hot, and he cast the tables out of his hands and brake them." And he took the calf and burnt it and ground it to powder and made the children of Israel drink of it. But 3,000 religious rebels fell before the swords of the sons of Levi.

of the silent fortress and returned to the supper table and my friends.

Some of the most precious religious documents now extant are housed in a tinder-box structure in the center of the monastery. Ever since Tischendorf rescued priceless pages of the *Codex Sinaiticus* from the kindling heap, scholars have worn a path to the old texts at Mount Sinai (see illustration, page 731).

The monks make little use of this famous library. The key, which had been sent by special messenger from Cairo so that we might inspect the books, refused to unlock the door. But a combination of others brought forth from obscure closets, and the removal of some sand from the tube of the one from Cairo finally solved the difficulty.

Earlier visitors have described the monks of Sinai as dirty and drunken. Quite aside from their cordial hospitality, we found none who were not neat and not even by a casual breath did any monk betray a predilection for alcohol. But those unaccustomed locks on the library door and the fact that not one of the three catalogues of the Greek, Syriac and Arabic treasures has been compiled by monks, speak more loudly than words can of the decline of monastic alertness and scholarship since the Dark Ages. Yet tears formed in the eyes of the Prior when I told of seeing the departed Codex in Leningrad.

The prize of the collection is the *Codex Syrsin*, once cast aside for the vellum on which it was written, but now the oldest manuscript of the Bible in Syriac.

The old text, in faded orange, was covered with the black lettering of a later manuscript, but patient skill has saved from its long effacement this second-century translation of the Book around which so much controversy and interest are centered.

We went up Jebel Musa by a road built by Abbas Pasha, who planned to have a

THE AWE-INSPIRING MASS OF THE MOUNT OF THE TEN COMMANDMENTS (SEE PAGE 723)

In the distance, at the left, is the Monastery of St. Catherine, 5,000 feet above sea level. Jebel Musa's elevation is 7,519 feet. This view is from the traditional site of the Plain of the Tribes, "and there Israel camped before the mount" (Exodus XIX, 2).

palace on the summit. The Arabs say that when the debauchee chose the holy mountain as a health resort, the idea of harem intrigues on the site of the Giving of the Law so inflamed Moses that he dealt the Pasha a shaking. Anyway, he abandoned Sinai and was murdered by a Mameluke, acting in a topsy-turvy version of Scheherazade.

THE ASCENT OF JEBEL MUSA IS EASY

Thanks to this curving road, practicable for camels, the ascent of Jebel Musa is absurdly easy. A scant half hour of climbing on foot up irregular pilgrim steps carries one to the top where a small chapel, a small mosque and the numbered granite blocks for a reconstruction of Justinian's church greet the eye. Beside the chapel is a tiny grotto or cleft where Moses received the Law, and below the south wall of the mosque is the cave where he passed the 40 nights.

The tumbled sea of granite hills seen from the summit has been likened to lava waves petrified when in full movement, but compared with the pit of everlasting fire at Kilauea or the pulsating, glowing heart of Asama Yama, these granite waves seem tame.

Sunrise and sunset, with their soft light and long shadows, add glory to this desolate peak and its barren neighbors, but more impressive is the view over the Plain of the Tribes as one sees it through the narrow cleft in the Ras es-Safsaf, believed to be the site of the Proclamation of the Law* (see page 719).

Photography rather than colorless words must picture the charming Plain of the Cypress, where Elijah heard the still, small voice and was turned back to Damascus. There is a well of cool water, a tiny green garden and the tall tree which gives this little lap in the granite mount its name (see page 736).

From there one descends the pilgrim stairway, not a regular, even flight, but a writhing, tortuous way, now cut in declivitous bowlders, now sliding down a cleft so narrow that a Jean Valjean could climb it by the outward thrust of knees and arms alone (see page 731).

We pass the gate where pilgrims to the holy mount sought remission of their sins so that with clean hands and a pure heart they could ascend the Mount of the Lord.

Lower down is the gate beside which St. Stephen sat to issue certificates to the worthy. To-day he sits in the crypt, guarding the cords and cords of monks' bones. He wears a robe and a cap with a cross on it. But the years have wearied him. His skull has nodded forward on his lungless chest and he leers at life in that room where Russian pilgrims got their winding sheets, already sanctified, but holier still if touched to the Stone of Unction at Jerusalem.

After four nights in the monastery we set out for Suez over the route by which the Israelites came in. A cool breeze swept across the Plain of the Tribes, where flocks of black goats roamed and lovely orange tulips or lilies peered modestly forth.

In a deep cut below a Moslem saint's tomb was a small field of grain, fenced in by thorn bushes, a cool spring and a hermit, this last a dark little man in skullcap and white gown, smoking his pipe beside two porcelain coffee cups and a smoldering bed of ashes in the shade of one of his date palms.

TURI WOMEN ARE "HORNED"

Up to this point we had seen no women, although two young girls drove their flocks past us as we rode toward Sinai. But here we found two Turi women, their faces hid in what the flippant Thackeray called a "nosebag" and their hair combed up in front to form a black horn which the linguist believed to be the horn of wifehood referred to by Hannah in her exultation, "My horn is exalted in the Lord" (see illustration, page 743).

A less attractive form of hairdressing I have never seen. The fore knot is so seldom untied that it looks less like glossy, healthy hair than some unnatural appendage erected long since and now ignored.

The next morning we saw many horned women at a Towara encampment, where they were nursing their babies, grinding grain in handmills or forming snowballs

* See, also, "Sunrise and Sunset from Mount Sinai," by Sartell Prentice, Jr., D. D., in the NATIONAL GEOGRAPHIC MAGAZINE for December, 1912.

THE GRANITE MOUNTAIN WHERE THE MOSAIC CODE WAS INSCRIBED

From the Plain of the Cypress, named because of its towering tree, one can look up to the summit, 700 feet above, to which Moses retired before giving his people a religious tradition that made them mighty. With a single cypress, its tiny well amid the mass of rock and the shade of a few small trees, this hollow in the lap of Mount Sinai has laid its spell on thousands.

THE MOSQUE ON THE SUMMIT OF JEBEL MUSA—MOUNT MOSES

Atop Mount Sinai are a small chapel, the blocks for a reconstruction of Justinian's church, and this small mosque, which is highly revered by the Moslems and Jebeliyeh (see page 735).

of milk curd, which they laid out on their black tents to dry.

This little encampment, contemporary picture of the ancient life, had an air of pastoral charm. While the women busied themselves in spite of their heavy bracelets and necklaces, bright-eyed babies peered from shadowy tents and young goats leaped, stiff-legged, among the maze of ropes. Tall, graceful men of the desert came down to greet us and to wish us peace as we rode away toward the "Pearl of Sinai," Wadi Feiran (see page 717).

THE OASIS OF FEIRAN WAS THE ISRAELITE-AMALEKITE BATTLEGROUND

The upper entrance to this oasis is through El-Buweib—The Little Gate—but wide as the giant doorway of the Temple of Bacchus, at Baalbek, and high as heaven. Through this entry to fertility, one glimpsed unusual colorings. Deep red streaks swept across the straw-colored hills, and light yellow mesas to the right broke away to dusty green clumps of tamarisk, the manna tree, which, if stung by insects, exudes the miraculous food.

Recently a destructive fire swept through a part of this site of Rephidim, where the desert wanderers fought the Amalekites. For perhaps a mile one follows the narrow valley, with charred palm trunks rising above lush fields of grain. And at the tip of those funereal trunks, below the blackened fronds, were unusually fine bunches of new dates, promising a bumper crop.

Where the narrow trail, widened for motor cars, crosses the stream, it passes through a dense jungle of rushes and palms, then rises to the left bank of the brook and runs below the ruins of monastic establishments once the center of the anchorite fraternities of Sinai when this obscure valley, now dotted with hovels, boasted its own archbishop.

It here developed that the fatalistic and irresponsible Arabs—the best of our men had left us the night before—had lost our fat-tailed sheep and didn't know where to find him. Our dragoman, having lost his hat that morning, had uttered a solemn curse on the "religion of the present day," and it seemed that that would exhaust his condemnatory ammunition. But by dint of imagination and strong feeling he ripped

Photograph by American Colony Photographers

A LASTING CLUE TO THE ISRAELITE TRAIL

The springs of Sinai, bitter or sweet, give the best indication of where the Children of Israel camped, for even the bitter ones are the centers for a certain amount of herbage and shade, and the camels like brackish water. Stilted in stride, haughty with pride, the camel is a baby, lacking in spirit. To get one to kneel, the Arab clears his throat with a "kh-kh-kh," and if that fails, pulls the camel's beard. To anchor a ship of the desert, the lower part of the fore leg is tied flat against the upper part.

loose a few goat-hair roofs from the ancestral homes of our Arabs and soon the sheep appeared, wagging its tail just as though it were rehearsing "Mother Goose."

THE MINES OF MAGHARA ARE MORE THAN 4,500 YEARS OLD

The following day we reached the Aramean, Arabic and Greek inscriptions in the Wadi Mokatteb, and an hour later passed the gaping mouth of the turquoise mines of Maghara, more than 4,500 years old.*

While Moses was leading his people toward Sinai, both prisoner-miners and Egyptian gendarmerie were doubtless stationed at the Maghara mines—evidence that the Israelitish leader did not use the short cut of which we availed ourselves, but took a longer and easier route nearer the seacoast and so up Wadi Feiran.

One can penetrate the shaft for an hour, but the climb is steep and rough, and as the whole valley was dancing with heat waves, we postponed our search for Astarte's turquoises.

Just before we reached the Nakb el-Budra we saw a land crocodile, or *dhabb*. This animal is esteemed as a delicacy by the Arabs, but none of ours knew it, so he proved of no value except as a rhyme:

"We are headed back toward Suez
For a hotel and a tub,
And we've seen a lot of thrilling sights
From Sinai to a *dhabb*.

The Nakb el-Budra is a sort of spiral chute descending from the plateau. The scenery here is excellent, though anyone familiar with such fire-tempered buttes of gray, brick red, brown, black and blue, would call them "bad lands."

Modern manganese mines were hidden in the hills to the north and the valley floor was deeply cut by the tires of motor cars, except where rabbit-wire had been stretched.

The Arabs, who the night before had camped an hour too soon, now showed their spirit of endurance and independence, and by the time the dragoman had found them, an hour too far along, our tents were flopping about in the windy Wilderness of Sin, where quails and manna appeased the grumbling Israelites.

Our seventh desert day was marked by a fleeting return to civilization, first through an exhilarating swim in the Gulf of Suez, and second by halting our caravan long enough for a train to pass. It was a tiny train of ore cars joining the cable railways from the manganese mines with the loading pier at Abu Zenimeh, ancient port for the Maghara and Sarbut el-Khadem mines. But it impressed us as though it were the first we had ever seen.

We passed this ostracized hamlet, which seemed so modern and luxurious that we dubbed it "Abu Cinema"; bucked a delightful sea breeze, entered the hills by Wadi et-Taiyibeh and rested in the most picturesque lunching place of the trip.

Marl banks 200 feet high overhung pools of brackish water which just suited the camels. They also took delight in rolling in the salt-crusted mud. Great clumps of palm trees rattled their rapier-pointed fronds in the breeze. Wadi Taiyibeh may be the site of Elim, but it can overlook uncertain claims to former fame and bask in the name the Arabs have given it—The Goodly Valley.

It is more likely that Elim, with its 12 springs and 70 palm trees, is the present Wadi Gharandel. Scholars assert that deforestation has caused a change of climate since the Exodus. But it is evident that 70 palm trees were worthy of enumeration then (Exodus XV, 27). There are fully that many in Wadi Gharandel now.

CAMEL DRIVERS SING AND DANCE ON WIND-SWEPT DUNES

We passed Gharandel in the morning and pushed on to Ain Hawara through a wind which kept our bodies comfortable, but burned our faces. The Egyptian cook, child of the desert, came to ask for cold cream, reënforcing his broken appeal with a boiled-lobster complexion. His naïve explanation was that the sand hurt his forehead when he prayed. And when he prayed next, the cold cream held some of the sand on his brow, so that, good

* See, also, "The Route Over Which Moses Led the Children of Israel Out of Egypt," by Franklin E. Hoskins, in the NATIONAL GEOGRAPHIC MAGAZINE for December, 1909.

"HEADED BACK TOWARD SUEZ FOR A HOTEL AND A TUB"

In the Sinai Peninsula even the native traveler must carry his own rations. All arrangements depend upon the camel, shuffle-footed and slow. On long desert trips the soles of its mattressed feet are sometimes worn to the quick, so that it goes lame. At the extreme left is a steel kilometer "stone."

Photograph by American Colony Photographers

WAS IT HERE THAT PHARAOH'S CHARIOTS WERE ENGULFED?

The site of the crossing of the Red Sea by the Israelites is a matter of pure conjecture, but the conjunction of wind and tide over wide shallow stretches might duplicate the conditions to-day were it not for the Suez Canal and its earthworks.

Moslem though he was, he looked like a caste-marked Hindu.

Camels seemed insignificant in this desert waste. The single telegraph wire looked nostalgic rather than helpful. The metal kilometer "stones" seemed lost. And at night, among the only real dunes we encountered in 11 days, we sat under the growing moon and watched our cameleers dance and sing in our honor.

Dark, wind-blown gowns against milk-white tents bellying in the breeze; the monotonous chant; the endless hand-clapping and swaying to music; the satisfied grunt of a camel—they seemed to fit the wind-swept dunes better than they did the walled-in wadies or the stony desert.

That night we slept at the west end of the soft-sand belt, called Debbet er-Ramleh, which separates the granite spearpoint of Sinai, the Tor, from the limestone plateau, the Tih, which is the tail of Lebanon and the Judean highlands. From now on it is pebble desert, *serir*, all the way to the Springs of Moses.

Along this part of the route, motor cars can move at high speed. The pebble-covered desert lacks the beauty of smooth dunes, but every riffle and softly curving hogback spells uncertain footing, obscured trails, slow going and sand-cut faces. It is the riffled dune, so pleasing to the eye, which endangers the eyes and where such dunes are found, even men wear veils.

Yet the serir, glittering with flints, is not unbeautiful. Desert animals trace their delicate autographs on the embryo dunes that form behind each tuft of vegetation. One lizard had left a trail so charming that it could have served as an embroidery design.

To our right stretched Jebel er-Raha, the even edge of the limestone plateau, the Wall of the Israelites. To our left, between the straw-colored sands of Asia and the lion-mane mountains of Africa (the Sinai Peninsula forms a political Africa Minor), lay the vivid gash of cobalt which is the Gulf of Suez.

We lunched at Marah, whose bitter springs caused the Israelites to rail against the Eternal, and spent the night in a level plain near the 40-kilometer mark. The dragoman rode up just in time to discover our improvident Arabs—they had provided themselves with a whole box of our oranges earlier in the trip—filling their water skins from our tanks. Before we arrived they had been compelled to return most of it. If the tea tasted of goat hair at the end of that ovenly ride, we did not notice it.

THE DESERT TEACHES THE TRAVELER NOT TO DISCOVER, BUT TO FEEL

Those last desert days taught us the value of traveling, not to discover but to feel. Until then our chief impression of Palestine was summed up in an irreverent story of how Moses, surveying the Promised Land from Pisgah peak, gave one look at the barren Judean plateau and then lay right down and died.

But after those Sinai days Judea never seemed as barren again.

We came upon the Springs of Moses before noon. Only a short distance away was the lazaret of Suez and the aluminum-colored oil tanks of Arbain seemed close at hand. But there would be no train for Jerusalem that night. We pictured the Saturday jazz band, the welter of black suits and pastel-shade silk dresses in the hotel, and the street noises of the bazaar, where men blow grain from their mouths into the crops of coral-eyed pigeons, and we gladly prolonged our stay in the oasis where Moses sang his song of deliverance and Miriam, leading her chorus of women, tambourine in hand, gloated over the destruction of the Pharaoh.

Our last morning looked toward the future rather than the past. The morrow would see us in Jerusalem and night in the tent of the Samaritan High Priest at the Israelitish blood sacrifice on Mount Gerizim.* Then amid the shouting hordes in the teeming courtyard of Nebi Musa and a silent moonlight walk on the wall of the Holy City.

Greek Easter was upon us with its Washing of the Feet, closely followed by the spirited entrance of the Nebi Musa procession through the Gate of the Virgin Mary (see text, page 667). Friday would

* See, also, "The Last Israelitish Blood Sacrifice: How the Vanishing Samaritans Celebrate the Passover on Sacred Mount Gerizim," by John D. Whiting, in the NATIONAL GEOGRAPHIC MAGAZINE for January, 1920.

Photograph by American Colony Photographers

A HORNED WOMAN OF THE SINAI PENINSULA

With life reduced to bare essentials, the Turi Arab woman (see text, page 735) loads herself down with cumbersome jewelry and hides her face behind what Thackeray called a "nose bag." But her distinctive feature is the horn of wifehood, a prong of hair projecting from the forehead.

find us in the monkish cliff nest at Mar Saba, and Saturday awaiting the Holy Fire at the Holy Sepulcher (see text, page 673). All the hurry and confusion of modern living were soon to engulf us, as the sea beside us had engulfed Pharaoh's chariots.

As each camel arrived at the bulky ferryboat, its load was quickly put aboard and silently each Arab stole back to his desert without a word of farewell. It was with a sense of loneliness that we felt the sail and current sweep us away from the desert of the Exodus as we slanted across toward Suez.

And there with Waghorn's statue looking out from the oh, so artificial and blessed trees of Port Thewfik, we repeated the last verse of our song of our desert march, now finished:

"And when at last we reach our homes
And ride by gas and steam,
We'll waddle through a wadi still
In many a wistful dream."

Left to right: Two silver coins of Tarentum, about 400 B. C.; a gold coin of Crœsus of Lydia, 568-554 B. C.; early Athenian coins showing the head of Athena on the obverse and an owl on the reverse side, 590-524 B. C.

Left to right: Two silver coins showing profiles of Mark Antony and Cleopatra, 43-31 B. C. (with one exception, the only known portraits of Cleopatra are those on coins); a silver coin of Syracuse, obverse and reverse, 405-345 B. C., the period of finest art in coin-making (see text, page 751).

Left to right: Early "pieces of eight" of Peru, and the obverse of the coin from which we derive our word "dollar." This is the "thaler," or "Joachimsthaler," issued by the Count of Schlick at Joachimsthal, Bohemia, 1518-1525 A. D. (see text, pages 752, 756).

SOME EARLY SPECIMENS OF "THE ROOT OF ALL EVIL"

Money is often the creature of geography. No man could walk up Broadway with a goat under his arm and use the goat to buy a ticket for a reigning musical comedy, nor could he pay for a haircut with muskrat skin; yet many so-called "backward peoples" still prefer barter to cash deals. In Timbuktu a goat is legal tender, and on Tiburón Island, Gulf of California, old clothes and jam or whiskey are preferred to dollars and cents—because there are no towns or stores where the Seri Indians can spend any money.

Barter survives, usually, in lands badly ruled, where, to their regret, the people have learned that a goat is a goat, but that often the fiat money of a rebel chief may drop to zero.

Twenty-three hundred years ago the Greeks made the most beautiful gold coins ever minted, and about the same time certain African tribes were using rock salt and live animals as currency. Largely because of their isolation, their lack of world contacts, the latter still use animals and rock salt to buy their wives and pay their debts. The use of coined money, as a rule, has kept pace with man's mental and economic progress, and a measure of a government's strength and integrity is the stability of its money.

THE GEOGRAPHY OF MONEY

By William Atherton Du Puy

TO-DAY in Wall Street or the Baghdad Bazaar — now as when Judas betrayed Jesus for silver and Marco Polo found Chinese making banknotes of mulberry bark—men dream and talk of money. They talk more about it than of any other one thing. Could we, by some magic, at this instant catch all words being uttered in every tongue everywhere, the most frequent would probably refer to money and price.

"Money," it has been said, "is what the other man takes for the things you want." Man has used money, in some form, since the dawn of civilization. Fishhooks and slave girls, beads, hawks and hounds, all have served as a medium of exchange. Early Virginians bought wives with tobacco. Once, it is said, Mexican Indians used cacao beans, until aboriginal crooks began making clay counterfeits, baked and varnished to look like the real.

The study of money, as an instrument of trade through the ages, involves art, heraldry, and mythology; it leads to economics and politics—and far into history. When kingdoms rose, often new moneys rose with them; and, when they fell, their moneys passed away. Nothing shakes a government like the depreciation of its money. The very progress of civilization itself may be largely measured by the pace at which the various moneys of the world have been standardized and accepted by international commerce. It was, to a large degree, the quest for gold and silver, and their use in coined money, which led to the exploration and settlement of America, Australia, and South Africa.

Metal-disk money was born in Lydia, at the eastern end of the Mediterranean, about 2,600 years ago. It appears to-day in its most ambitious form as the American dollar.

Cowrie, the lowly shell money of the antipodes, has through the ages been the most widely circulated rival of the metal disk; but its day of dominance has departed. Only isolated communities still cling to it as money (see page 768).

Yet cowrie can boast that more people have used it than have clinked the metal disks in all their varieties. It has served a greater number of human beings as a medium of exchange than any other money devised by man.

COWRIE SHELLS WERE THE WORLD'S FIRST MONEY

Shell money, beginning as ornament, has been popular with aboriginal peoples almost everywhere; but no other has gained the prestige of cowrie or persisted so long. It was born of a pretty little mollusk taken from the shallow spots of the Indian Ocean, and used by all the inhabitants of that geographical area washed by its waters.

These shells were white or straw-colored, about an inch long, glistening and clean. They constituted what was probably the first money in all the world, the medium of exchange for dense populations, and served many men for many generations. Cowrie's last ambitious stand was made on the West Coast of Africa, where it was in general use as money a generation ago. It is still current in isolated communities in Africa, India, and the South Seas, but has practically given way to the advance of the moneys of commercial nations.

The cash of China, coins with holes in them, still dominate the marts of many men in a considerable corner of the Asiatic world. There exist inscribed cash pieces attributed to 1115-1079 B. C. and similar pieces, uninscribed, believed to be earlier.

The tao, also of China, was one of the first metal coins in the world. The word means "knife" or "sharp-edged instrument," hence the name was applied to the razor-shaped coins of old China.

The earliest Chinese metal coins are believed to have been miniature spades, uninscribed and without perforation and with open shank for inserting a handle. Some authorities place them earlier than 2000 B. C.

Convenience for carrying is accepted as accounting for the introduction and long use of perforated coins by China and its neighbors. From earliest times a string has been the poor man's pocketbook (p. 759).

Photograph by National Photo Company

A DOLLAR BILL WEARS OUT SOONER THAN A PAIR OF SHOES

In eight months the average dollar bill in circulation is worn out. So the Federal Government must constantly replace its paper money. Obviously, however, a $500 bill will wear much longer than one of small denomination. Paper money, ready to be distributed from the Treasury Department, Washington, D. C.

There have been many unique moneys in different countries. Nails were once so precious that they were used as money in Scotland and in New England in pre-Revolution days. And while the mark was skidding to zero after the World War, postmasters in remote parts of Germany used shoe nails for small-change purposes—they had a fixed utility value.

Bars of crystal salt are money in many parts of Ethiopia. This medium of exchange, however, suffers deterioration in a strange way. It has become a nice courtesy, when meeting a friend, to proffer a coin to be licked. So does the money lose weight through friendly hospitality, and it is to be hoped that the salt acts as a germicide!

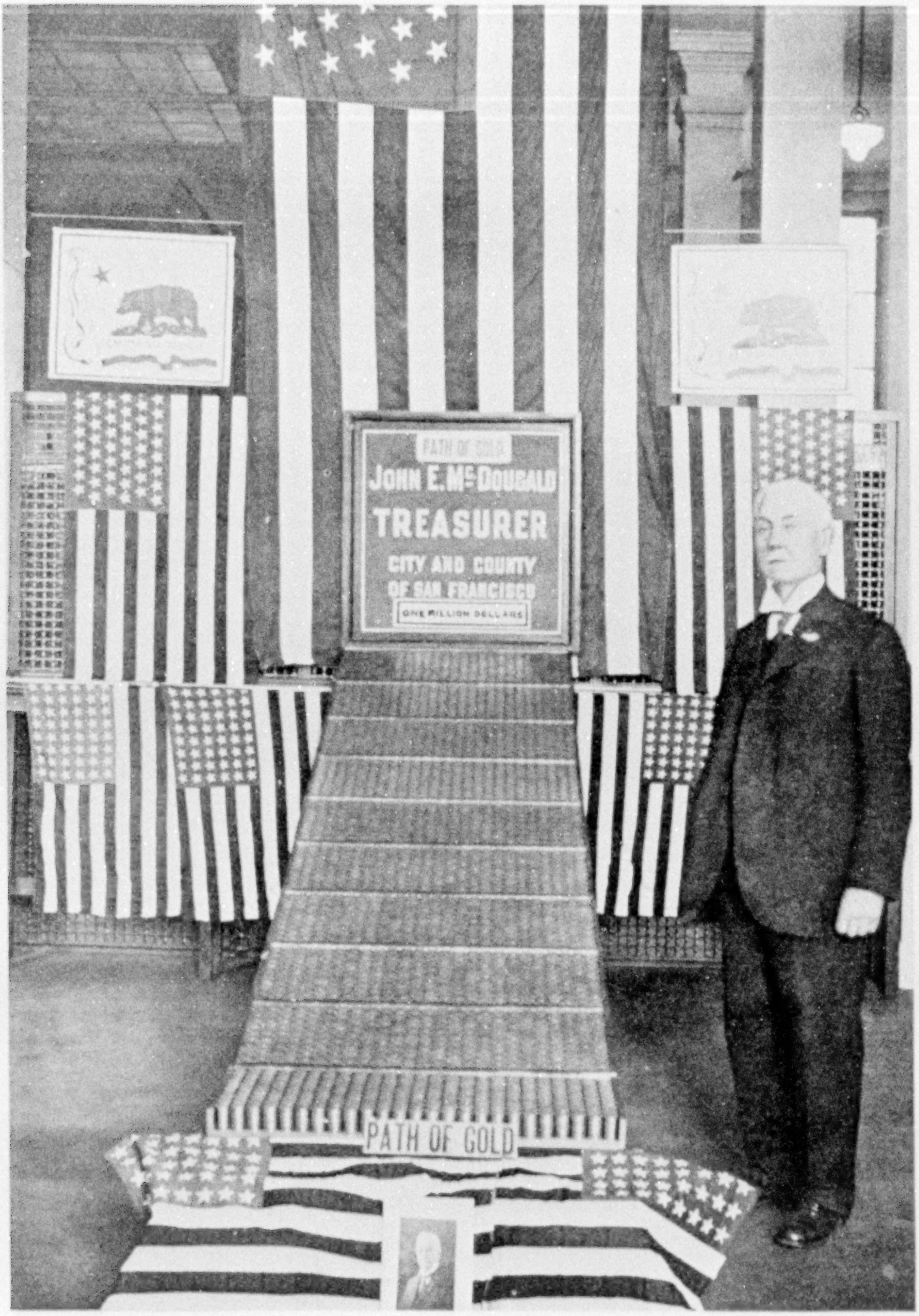
THE CARTWHEEL COINS OF YAP

The island of Yap, of the Caroline group, neighbors in the remote way of the South Seas with the Philippines and New Guinea, undoubtedly boasts the strangest of money. It is of stone and the coins are sometimes 12 feet in diameter and weigh many hundreds of pounds!

The stone from which this money is made is not quarried on Yap, but must be brought from another island hundreds of miles away. The mild-natured Polynesian who is able to hire the labor necessary to cut out one of these huge coins and transport it to Yap is, admittedly, a man of wealth and consequence. It is convincing evidence of one's financial status to deposit one of the large stones in front of one's home and let it "take root" (see illustration, page 759).

To-day the legal tender of a modern world is the metal disk of gold or silver.

To be sure, many lands have contributed to its development. Political geography, the resources of peoples, their



Photograph by C. E. Finnell

THIS IS WHAT A MILLION DOLLARS IN GOLD COIN LOOKS LIKE

Here are 50,000 twenty-dollar gold pieces. The pile weighs one and seven-eighths tons. Each of the 10 trays holds $100,000. The space that holds the $1,000,000 is 11 feet 3 inches long, 2 feet 10 inches wide, and 2 inches deep. This "path of gold" was exhibited in the office of the city treasurer of San Francisco, California.

Photograph by Earle Harrison

IN FAIR AND BAZAAR ALL TRADE WAS ONCE MERELY SWAPPING THINGS

For centuries, in Europe, Asia, and Africa, the objects of commerce were themselves the only form of money. Live stock was long a medium. Our word "pecuniary" comes from the Latin *pecus*, or cattle, from which came the Latin word for money, *pecunia*. The scene above is a bazaar near Cairo.

surges into new areas, the needs of increasing populations, have gone toward creating that type of money the use of which has become almost universal.

It is nearly 3,000 years back to the time of Homer, when there was no such thing in the Western world as money. People bartered in the markets, exchanging suckling goats for woven rugs. There were neither ducats nor dollars in which to price them, nor was there an established measure of value. The habit of haggling, still prevalent, may have come down from those ancient days of barter.

The idea of money was not yet born to that borderland of Europe and Asia that was then the West. The nearest approach to an article that would function as such was the milk-faced ox.

THE OX AS A MEASURE OF VALUE

This animal possessed one prime requisite of money. It was generally recognized as a thing of value desired of all men. Money must primarily be something that every man wants, for which he will exchange any of his ordinary commodities, and the ox came nearer meeting this test 1,000 B. C., in the triangle that was Greece, Egypt, and Palestine, than did

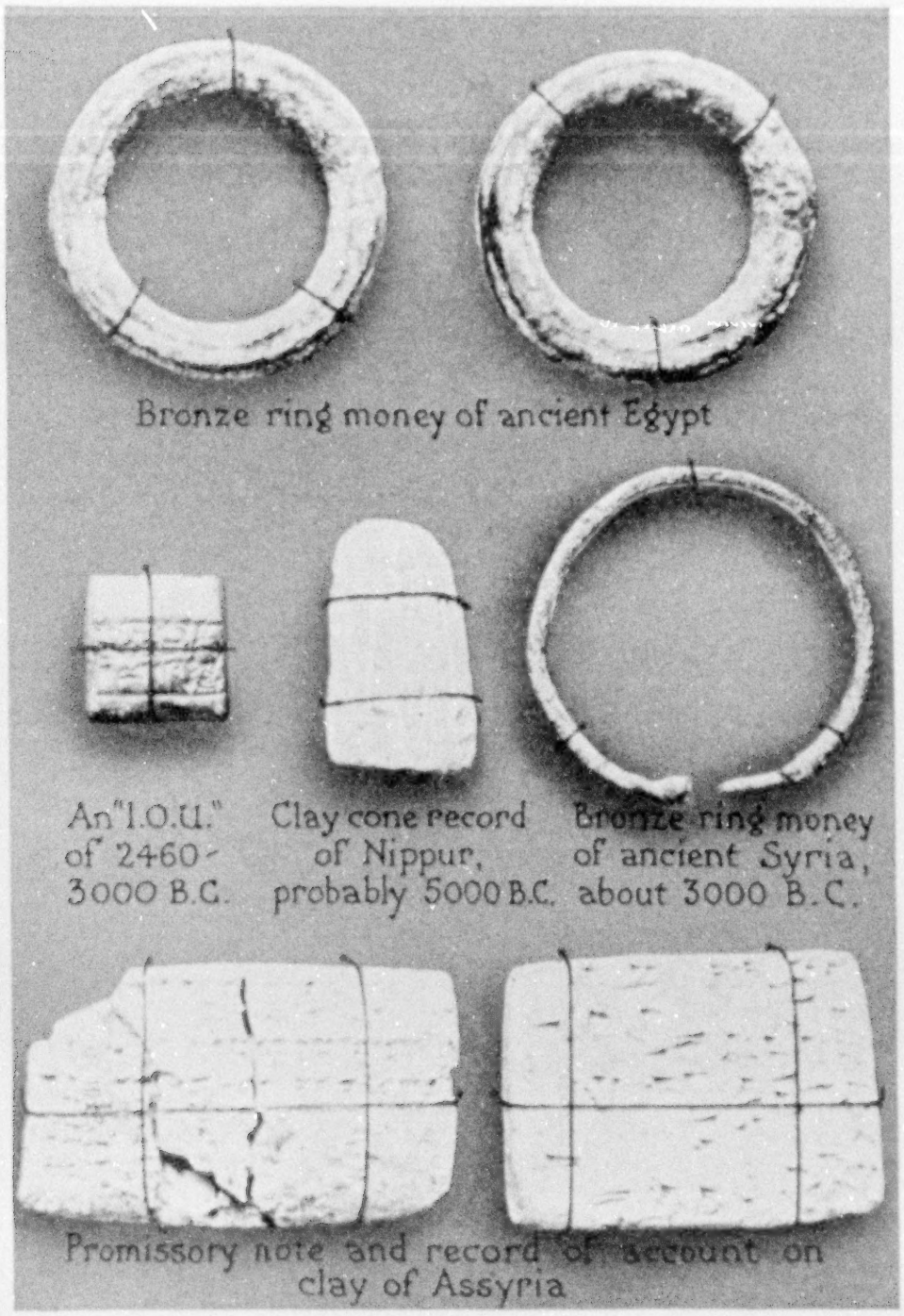
any other element of wealth among the masses.

The peoples from which Western civilization sprang were pastoral folk, their wealth being represented in sheep and cattle. Gradually they came to measure other values by the unit of the herd, the ox. A little later armor was priced in oxen. A knight could buy a serviceable suit of armor for 10 oxen, but one of choice workmanship would cost him 50.

The modern word "pecuniary," from *pecus*, cattle, has its place in our language because cattle were once money.

Sheep represented a lower monetary denomination. They were small change! Ten sheep equaled one ox.

There were certain disadvantages in using live stock as money. For one thing, it might walk away in the night; for another, it consumed much provender. There were difficulties about small change for the purchase of such edibles as kettles of fish and messes of pottage.



Photograph from Farran Zerbe

ANCIENT MONEY OF THE NEAR EAST

COPPER POTS SUCCEED OXEN AS MONEY

The human geography of this region, which had been pastoral, about this time got an industrial urge. A way had been found of extracting a metal from the earth of the island of Cyprus, handily set in the eastern Mediterranean. The Romans later twisted the name of this island in such a way that the modern word "copper" was derived from it.

Copper pots began to appeal, and, like cattle, were universally prized. Merchants would exchange whatever they had in their stalls for copper pots, and the demand for them was more nearly universal than for any other object. The copper pot was, therefore, money.

Indeed it was better money than cattle, for it did not eat or run away and was durable; also it had less bulk in proportion to value.

Then into this region came one imbued with an idea of importance. Instead of presenting pots for use in facilitating barter, he would tender the copper of which they were made. He would offer it in a convenient form, made up into a strip which he called *obolus*. No definite idea of its size survives, but it was said that six made a handful. The obolus

Photograph by Leon Van Dyk

THE TRAVELER IS RARE WHO CAN OUTFIGURE A CHINA-COAST MONEY BROKER

With his scales, his trays of native and foreign coins, and his "shoes," or silver sycee, he lives by his wits. Sometimes the scales hold a secret; also, many a gold coin has come back from a trip to the Orient neatly hollowed out and refilled with other metal.

marked a great advance toward the use of coin.

The scene shifted to the West. Italy, as it awoke from barbarism, adopted a unit of copper as a measure of value. It called the unit *as*, a Roman pound of 12 *unciæ*, or ounces, and it came into general use.

Copper served the purpose of money because of its intrinsic value. The as had the value of a pound of copper. Human nature being the same then as now, it soon came to pass that people made the as in a weight a little less than a pound and profited to the extent of the metal thus saved. They learned to mix certain quantities of baser and cheaper metals with the copper and their currency deteriorated.

Thus a step toward the development of actual money was forced on the nations. Governing powers found it necessary to step into the breach, to test metals used as money, to put their stamps guaranteeing quality and weight upon them, and by this avenue copper coins arrived.

Coins of precious metals were, however, to come out of the Near East. The first

were made in Lydia, a country in Asia Minor, in the neighborhood of Smyrna, half oriental, half Greek. In Lydia there were gold-bearing sands (see text, p. 764).

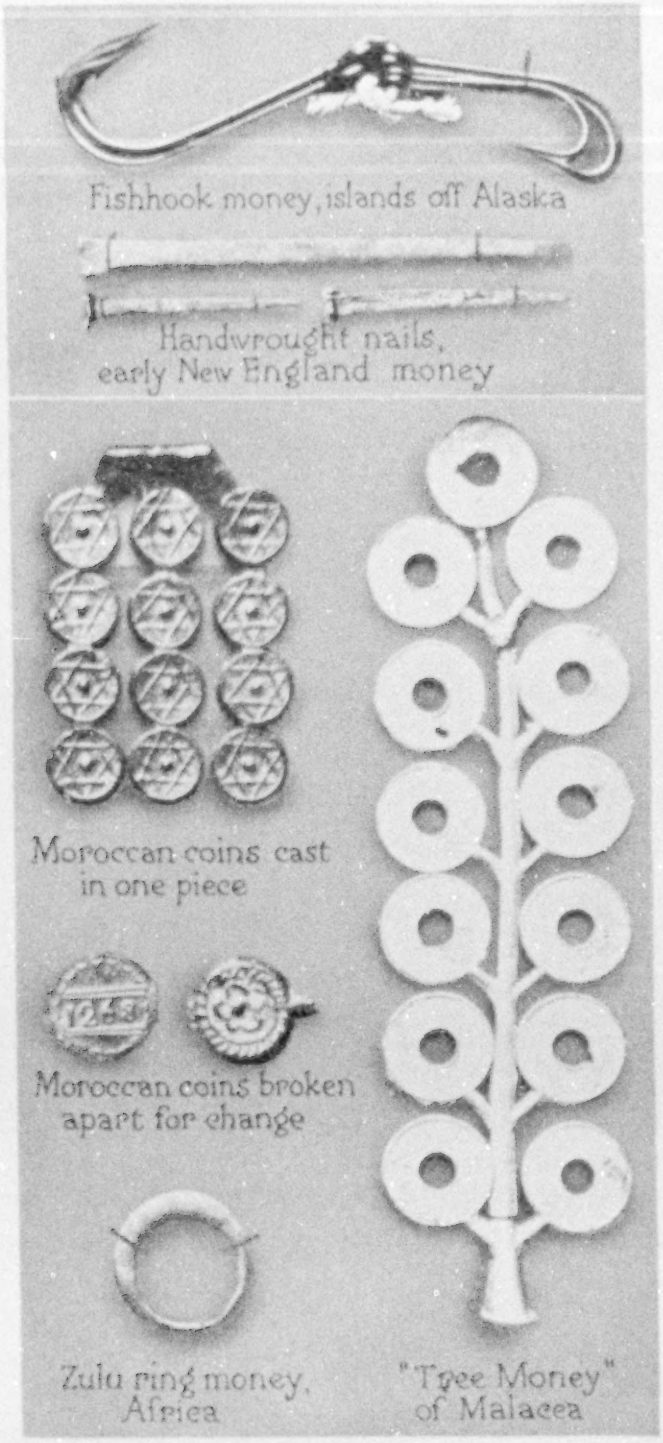
These early coins were made of electrum, which was unrefined gold having an alloy of about 30 per cent silver. They appeared about 700 years before Christ. A good many survive and may be seen in numismatic collections. They look as if the manner of making them had been quite simple. The metal seems to have been poured out and allowed to form in roundish puddles. Thus did the disk develop naturally.

At the right moment in its cooling it appears to have been impressed with a design, much as one may put his seal in wax on the back of a letter.

A study of the development of coin-making, that started in Lydia, under Greek influence, gives additional evidence of the magnificence of the civilization that so strangely developed in this small area. As Greece set standards in sculpture and architecture that have not since been equaled elsewhere in the world, so did it strike coins that are masterpieces of the ages. Those made in that country several centuries before Christ from dies cut by master artists are more beautiful coins than any minted to-day by great nations with all the accessories of science (see page 744).

The modern world sacrifices art for utility and durability, such as the raised protection rim and inscribed edge.

The precious-metal coins of the ancient Greek world did not come into general use, however.



Photograph from Farran Zerbe

PRIMITIVE COINS AND OTHER MEDIUMS OF EXCHANGE

As in the case of the Moroccan dozen, the "branches" of the tree money of Malacca are broken off for small change.

COPPER, BECOMING PLENTIFUL, LOSES ITS VALUE AS MONEY

As the centuries passed in the Mediterranean area, copper became plentiful and its purchasing power decreased.

Rome was getting much of the earth of Cyprus. Thus it developed that an average householder of ancient Rome, going to market to buy for a feast day, would need to pack a donkey to bear the weight of the copper for his shopping.

The metal came to be too bulky in proportion to its value. Yet it held its place until another metal appeared that better served money purposes. That metal was silver. The map of the civilized world was expanding. Spain had begun to produce. As copper grew too plentiful, silver, which had been too scarce, began to appear in sufficient quantities for general employment as money. Two centuries before Cæsar it had won its place as the fittest of metals for such use.

Silver ruled the money world for 2,000 years. Maps were made and remade under its influence.

Civilization moved westward and Charlemagne established an empire of the

Photograph by Topical Press Agency

A FAMILIAR SCENE ALONG WARM WATER TOURIST PATHS

When business is brisk, these Madeira Island boys, diving for coins thrown from a ship's rail by tourists, spurn copper offerings. Not a difficult feat, this; for coins turn over in sinking, and bright silver pieces give off flashes of light, making them easy to locate. The boys put the coins they catch into their mouths and continue diving for more as long as tourists will toss them.

French in the eighth century on a silver standard. He formally decreed that the pound of silver should be the basic measure of value, and a continent accepted his edict. So it happens that in France to-day the word *argent* means "money," although its literal significance is "silver."

Money history began to be written in another geographical area. The English began to talk of the "pound" in designating a money unit. This is the silver pound of Charlemagne.

Originally 240 pennies were made from the pound of silver, and although the pound (sterling) has become a measure of value and not of weight, the relation to the old value standard continues—240 pence to the pound (sterling).

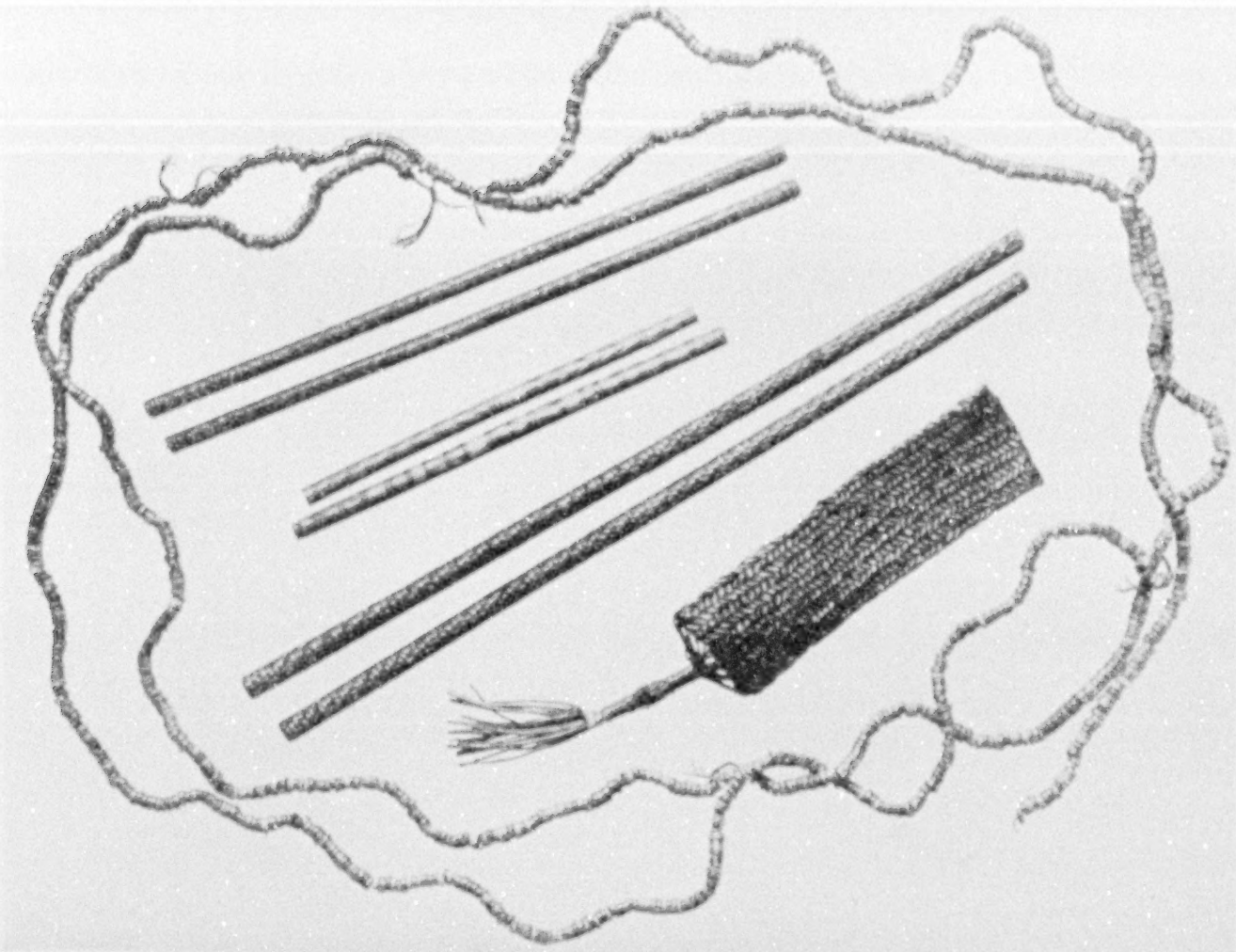
The English word "shilling" has a geographical origin that is quite different. It was first used by the blonde barbarians of the north.

These warriors and their opponents were given to wearing rings and arm bands made of silver or gold. After battles the rings of the slain were highly prized by the victors, and were gathered and properly distributed by an official who had charge of this division of spoils. He was known as the ring-breaker and was actually the first treasury official of these northern tribes.

The rings were so made that they broke up into bits of a somewhat uniform size. One fragment was called a "schillingas." In the north it was an early form of money, and from it came the shilling, so dear to the English heart to-day.

THE ANCESTOR OF THE AMERICAN DOLLAR

The world was short of actual money from Cæsar to Columbus. There was little progress during that long stretch and there appears to be some soundness in the theory that the absence of a circulating medium of sufficient quantity to make development possible was, in part, the reason for the stagnation. Yet, despite its scarcity, money events were taking place about the map of Europe and seem, in



© Dr. William M. Mann

MILADY'S BEADS ARE AKIN TO SAVAGE STRING-MONEY

The firecrackerlike object is an arm band of shell money from the Solomon Islands. The straight pieces are three pairs of ear-stick money and the string is red-shell money, from which modern beads descended.

retrospect, to have been in preparation for the coming of better days.

Toward the end of the time of shortage there appeared in the interior of medieval Europe an individual who was to write a chapter of money history that has come down strangely into modern times, and to give a new nation of the West a currency unit that was to have a profound effect. This man made the first dollar in all the world, and gave it a name which, though the etymology is not apparent at a glance, becomes upon examination the lineal ancestor of the word "dollar."

The Count of Schlick, for such was his title, dwelt in St. Joachimsthal (Joachim's Dale), a mining region of Bohemia. The patron saint of the community was St. Joachim.

Here the Count of Schlick, in 1516, appropriated a silver mine. As his retainers took out the precious metal, the master laid his finger to his temple and considered the purpose to which he should put it. He must have been a man of perception, for he seemed to realize that he dwelt in a money-hungry world, and that his silver would serve best if made into coin.

At any rate, he devised a new one all his own. On its face appeared a reproduction of St. Joachim, and it was named after that personage and the community which gave it birth—Joachimsthaler. It was the first dollar (see page 744).

Now note the evolution of the word "dollar" from this, its polysyllabic ancestor. When the Joachimsthaler found its way into medieval Germany it was warmly welcomed. A practical people, however, soon tired of the length of its name, and by a judicious dropping of syllables it became the "thaler." The word in that form still survives in Germany.

When the thaler passed into the Netherlands its pronunciation was somewhat

Photograph by Merl La Voy

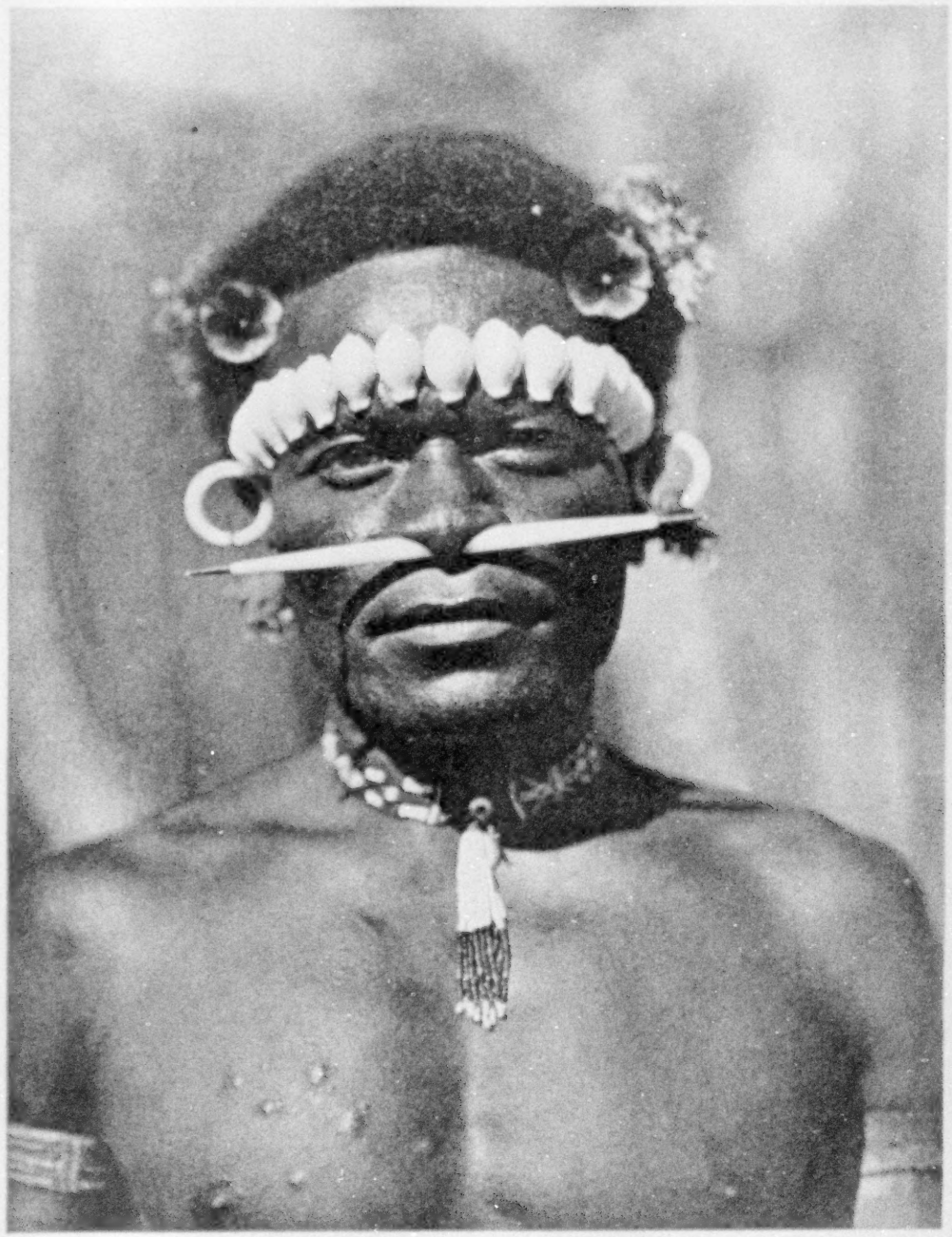
AN ALBANIAN MAID WEARING A NECKLACE OF GOLD COINS

Wampum served as adornment, but particularly as money. Precious metals, because they were more scarce, succeeded teeth, shells, bits of bone, beans and feathers.

Photograph from Farcan Zerbe

THIS COPPER CROSS WILL BUY A WIFE

In the Baluba country of central Africa this oddly shaped copper coin is in use. It is about 9 inches across and weighs 28 ounces. In our money it is worth less than 30 cents, but on the Congo it buys a wife.



© Merl La Voy

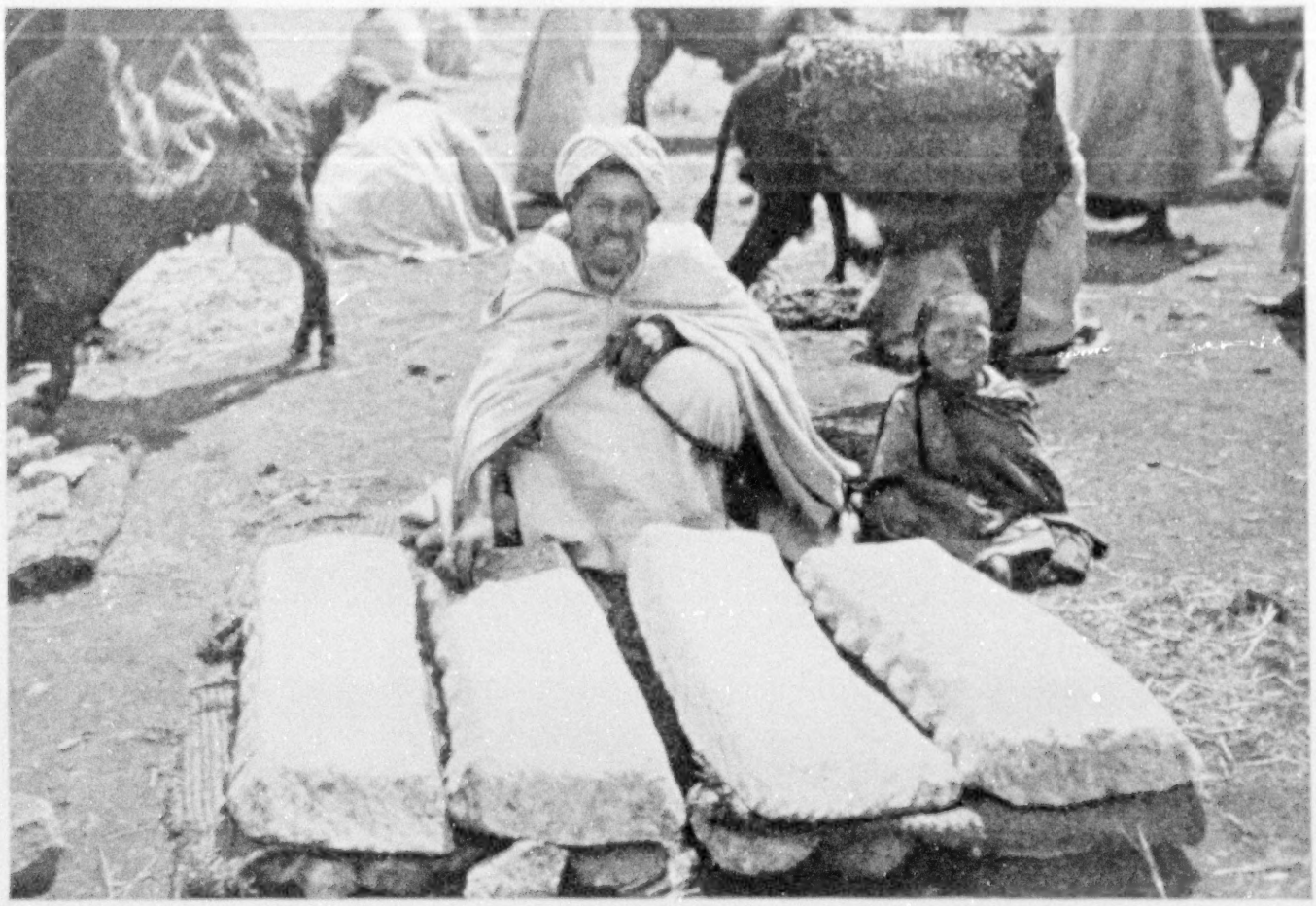
A PLUTOCRAT OF THE SOLOMON ISLANDS

In the South Seas a favorite money is made of porpoise teeth. Natives of Malaita, of the Solomon group, drive a school of porpoise into shallow water, where they smother themselves in the mud. Their teeth are then extracted and made into money.

Photograph courtesy Agence Economique du Gouvernement de l'Indo-Chine

AN ANNAMITE PEASANT GOES TO MARKET

The chief native coin in this part of French Indo-China is the *sapek*, of zinc or tin, a string of which is seen between the peasant's hands. The introduction of perforated coins is credited to the Chinese, who adopted this type of money for convenience in carrying.



Photograph by Flandrin

HE WILL NEVER "THROW HIS MONEY AT THE BIRDS"

Rock salt, broken into convenient bits, serves as small change in many regions of Africa. A rock-salt merchant of Morocco whose pile makes him smile (see, also, text, page 746).

changed. There it was called the "daler." Then it crossed to England, where, by use of the broad "a," daler became "dollar." Under this modified name and geographically transplanted, the Joachimsthaler of the Count of Schlick has grown and prospered.

HOW THE DOLLAR CAME TO AMERICA

The story of how the dollar came to America is no less interesting. In the two hundred years that followed its birth there were many money denominations in different parts of Europe that were similar to it in size and value. These were called by different names in various localities, but to the English all were dollars.

There were, for instance, the Spanish pieces of eight, so-called because of the prominence of the figure 8 on the coins (meaning eight *reales*), and chiefly familiar by that name to-day because of the prominent rôle they play in pirate history. They grew to have a mighty influence in the three centuries after Columbus, and were the dominant money in the Western world (see, also, page 744).

The procurement of precious metal in order that the supply of them might increase was the chief aim of the Spaniards in transatlantic operations. Their country's activities were based on a search for gold and silver, which were found in abundance, particularly in Peru and Mexico. Spaniards developed silver mines in Mexico that turned out to be the richest the world has ever known.

As a result of this quest for precious metals, Spain extended her sway over two-thirds of the Western Hemisphere. It was her search for the money metals that unrolled the larger part of the map of the two Americas.

Much of the silver went into pieces of eight, which the English called dollars, and this denomination became the ruling unit of the Western Hemisphere and one that was to grow in power as the centuries passed.

Other nations acquired some of this silver and increased their circulations, but Spanish money became most abundant of all. The appearance of the silver flood helped Europe to awake. The urge of the

time was the building of argosies and the development of the far-away lands which were reached by them. These were the centuries during which much of the world map of to-day was taking form. The day of glory dawned for Spain. Half the Western world came under her sway, and, as a result of her activity during the two centuries following Columbus, half of it still speaks the language of the Iberian Peninsula.

COLONISTS USED WAMPUM AND TOBACCO AS MONEY

In the meantime the English Colonies to the north were struggling for a permanent footing. Among many embarrassments was one due to the lack of a circulating medium. They had almost no money with which to trade. England obtained little of the silver of the West. She herself was tragically short of currency and had none to spare her Colonies.

In New Amsterdam and Massachusetts the colonists fell back on the wampum of the Indians. This was one of the aboriginal shell moneys, but made on a different plan from the cowrie of the East (see text, page 745). It was a bead money, carefully ground, highly polished, and pierced with holes for stringing. It represented much labor in its preparation and was highly prized as ornament.

On Long Island there were excellent deposits of the shells from which wampum was made, and here the Indians had established mints. But in the end the colonists came to make the wampum themselves. They had tools superior to those of the Indians, and could turn out the money faster. Yet they made it with less

Photograph by Ida Rose Kratsch

SERBIAN PEASANTS BEDECKED FOR A FESTIVAL

Primitive man had three wants—food, shelter, and the gratification of vanity. Always he sought to rival his neighbor in appearance. In this gratification of man's vanity lay the real origin of money, since personal adornment was the first evidence of wealth. These Serbian peasants are wearing strings of coins.

Photograph by J. W. Beattie

YOUNG MEN OF THE SANTA CRUZ ISLANDS, SOUTH SEAS, BUY WIVES WITH MONEY MADE OF FEATHERS

Odd, yet beautiful, is this strange currency. It is made from the red headdress of a tiny jungle bird. To catch this bird the natives fill a mussel shell with a sticky sap; then imitate the call of the bird to lure it to this trap. It comes, gets its feet caught in the sticky sap, and is then easily taken.

Photograph from Junius B. Wood

ONLY GIANTS COULD "MATCH PENNIES" HERE

Round stone coins, sometimes a dozen feet in diameter, are used on the island of Yap. They are not circulated, but simply stand before a man's house, indicative of his accumulated fortune (see text, page 746).

Photograph by W. Robert Moore

SHYLOCK'S LATEST AND BEST PORTRAIT

For ways that are dark and tricks that are vain, the money changers of the Orient are peculiar. Here is a Chinese coin broker of northern Siam and his layout (see page 745).

Photograph by Maynard Owen Williams

HE HAS MONEY TO BURN: FUKIEN, CHINA

Set afire and cast adrift on rivers in times of plague or calamity, this spirit money is supposed to appease the devils. Some of it is perforated with fine holes; and, says an old tale, if this money be cast on the ground, then pursuing devils must pause and pass through each little hole in the spirit money.

care. They produced so much of it and their product was so inferior that wampum, as money, became useless. Thus makeshift currency had been once again spoiled by the cunning of man.

In Maryland and Virginia the peculiarities of a community again asserted themselves, and tobacco came to be money. It was a commodity which everybody wanted and would accept for whatever else he had. The holder of tobacco had but to wait for the first boat to England to warrant its transformation into what he desired for creature comforts or use. It was made legal tender. It was accepted in payment for taxes. It was money.

PIECES OF EIGHT ADOPTED BY AMERICAN COLONIES

Into this colonial condition of an absence of real money a new element was introduced. The Spanish piece of eight began coming up from the south (see illustration, page 744, and text, page 756). It found itself at a premium in this land of currency shortage and this fact accelerated its flow. Soon it came to pass that there was more Spanish coin in the Colonies than English money. It proved a convenient currency, and values could be computed in it more readily than in English money.

So, when the United States came to set up its own money, it adopted the Spanish rather than the English system as its basis.

The piece of eight, the Spanish *peso*, became the central unit in the new currency. But it was called neither a peso nor a piece of eight. Recourse was had to the old English word that had come circuitously out of a little Bohemian community. It was called a "dollar."

The dollar is a piece of eight. In Spanish this signifies eight reales. In English it is spoken of as eight "bits." A bit is twelve and a half cents. In the South and West it is still customary to say "two bits" and "six bits." So does the division of

the pieces of eight of piratic days on the Spanish Main still survive.

FIRST COINS OF UNITED STATES APPEAR IN 1794

In 1794 the silver coins of the new nation began to appear—the half dime, half dollar, and dollar. In 1795 came the half eagle and eagle in gold. The silver dime and quarter dollar appeared in 1796, as did the quarter eagle. The double eagle, however, was not struck for circulation until 1850.

Of these the half dime has been displaced by the nickel five-cent piece. The present one-cent piece has been added and completes the metal currency as now in use.

Other coins have been issued, maintained for a time and discontinued. A three-dollar gold piece was minted from 1853 to 1890; a one-dollar gold piece from 1849 to 1890; a trade silver dollar for use in China, that was heavier than the standard coin, from 1873 to 1887; a three-cent silver piece from 1851 to 1873; a three-cent nickel piece from 1865 to 1890. A two-cent bronze piece, a big one-cent copper, a one-cent nickel piece, and a half-cent copper, have each been minted for a time and abandoned.

Photograph by Maynard Owen Williams

YOUNG DEVIL-WORSHIPERS OF ARMENIA

More clothes and less jewelry might be better for these children of the mysterious devil-worshipers, scattered from Baghdad to Van and beyond.

Mexico and most of the countries that were once a part of the Spanish Empire stamp their coins "peso," but they are commonly called "dollars." Canada, though a British dominion, uses a dollar which, at par, is of equal value with ours. China stamps "dollar" on its coins, and Japan has its comparative coin called a "yen." The old Spanish pieces of eight, named "Spanish milled dollars" on the paper money of American Revolution days, have influenced the currency of a good part of the world, particularly of the regions that prefer silver.

One other great monetary evolution, probably the most stupendous in its immediate results of any since the Lydians stamped their first coins, has been the recent world dominance of gold and its displacement of silver as the international standard of value.

Silver reigned as the money metal from 200 years before Cæsar until the latter

Photograph by H. J. Vinton

TWO BRASS-BOUND BEAUTIES OF BURMA

About her neck the woman at the left wears 15 pounds of brass. The legs of both are wrapped in polished hardware and beads. About the neck of the woman at the right are strings of rupees and beads.

Photograph from L. G. Popoff

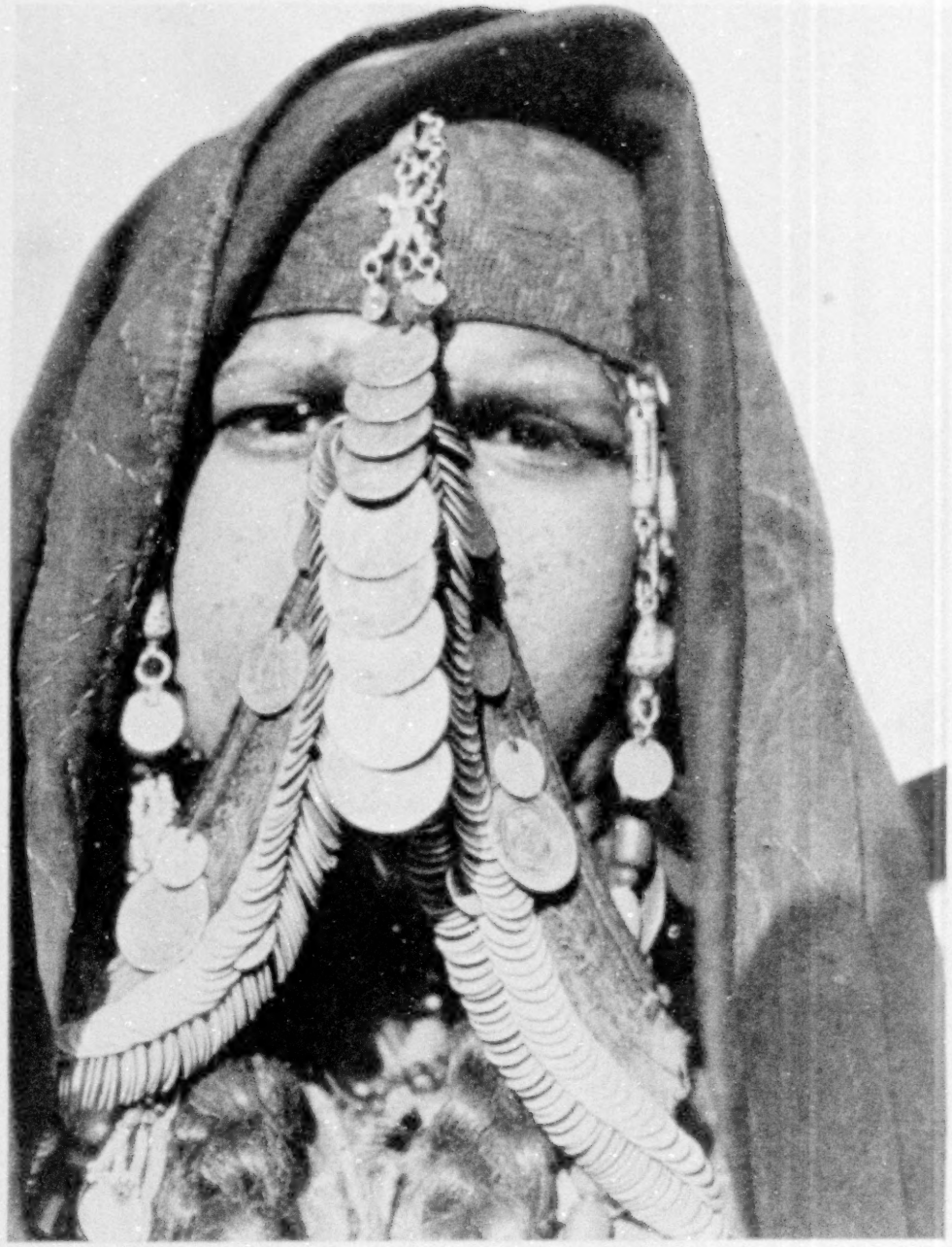
HER FACE IS HER FORTUNE

In certain Bulgarian villages near Sofia a girl is decorated like this on her wedding day. A thick wreath of flowers is put about her head; then across her face are hung strings of silver coins.

Photograph from Hooker A. Doolittle

TWO HEAVY-HEADED HEIRESSES OF TURKESTAN

It took 30 pounds of coins to make each of these ornate headdresses, as worn by these Transcaspian nomad women. Because of their weight, these lavish hats are donned only on special occasions.



Photograph by Maynard Owen Williams

A DOLLAR PRINCESS OF PALESTINE

With her cash register complex, probably this maid will be wooed less for love than for money. It is the scarcity of banks in the East which compels people there to keep their savings in coins and jewelry.

Photograph from Farran Zerbe

THIS "BANK NOTE" IS MADE FROM TEA

In Siberia, Tibet, and Mongolia one finds "brick-tea money" in use. Tea merchants sweep up tea dust and scraps of leaves from the warehouse floor and press the refuse into inscribed bricks. This specimen, slightly enlarged, shows one of the four segments of a brick which is so made as to be easily divided for making "change."

half of the nineteenth century (see, also, text, page 751).

Gold had, of course, always existed in the background, and had from very ancient times been accepted as a universal symbol of the highest value. For purposes of comparison, it was employed by the Psalmist as a standard of supreme worldly worth when he sang thus of the judgments of the Lord: "More to be desired are they than gold, yea, than much fine gold," and again, "I love Thy commandments above gold, yea, above fine gold."

Cræsus, the last king of Lydia, reckoned in his day the wealthiest potentate in the world, counted his treasure chiefly in gold, taken in part from the ore-bearing sands of the river Pactolus. This stream, according to legend, had derived its auriferous nature from the fact that the Phrygian king Midas had rid himself of the curse of the gold touch by bathing in its waters.

And Darius the Great, that many-sided eastern monarch who reigned from 521 to 485 B. C., takes credit for fixing the coinage in his dominions and for introducing the gold coinage known as the Daric, derived from a Persian word meaning gold.

But the use of gold in the marts of trade had been the exception. Silver had done the money work of the world. It had held its place because it had been the fittest competitor through all the centuries since it had displaced copper.

As the transactions of business grew larger, however, silver, with its comparatively low value, became troublesomely bulky as the agent through which trade was to be carried on.

Gold presented itself as a substitute. But it likewise had a serious defect. There was not enough of it.

GOLD RUSH CHANGED MONEY COURSE OF THE WORLD

Then, in 1848, an event occurred which changed the money course of the world. James Marshall, building a sawmill in Eldorado County, California, picked up a

lump of gold in its tailrace. This started the gold rush to the Pacific coast. Three years later gold was discovered in Australia, and in South Africa in 1885. Thus different geographical areas contributed to the increase of the gold supply and it began to be more plentiful.

Another great event in the gold history of the times was the development of the cyanide process for extracting the metal from its ores. In 1890 this process was introduced in the Rand mines of South Africa and made possible the working of low-grade ore previously considered worthless.

This series of events led to an outpouring of gold. In the nine-year period from 1801 to 1810, the world produced $118,152,000 worth of the yellow metal. In 1910 there was produced in a single year $454,703,900 worth, almost four times as much as that produced in nine years a century before.

Photograph by Maynard Owen Williams

A CROATIAN PEASANT COUNTING HER CASH

Yet the treasure vaults of the nations were drinking up these floods. Governments everywhere were putting their currencies on a basis of redeemability in gold. They were buying whatever gold was presented, but paying for it in paper money redeemable in that gold.

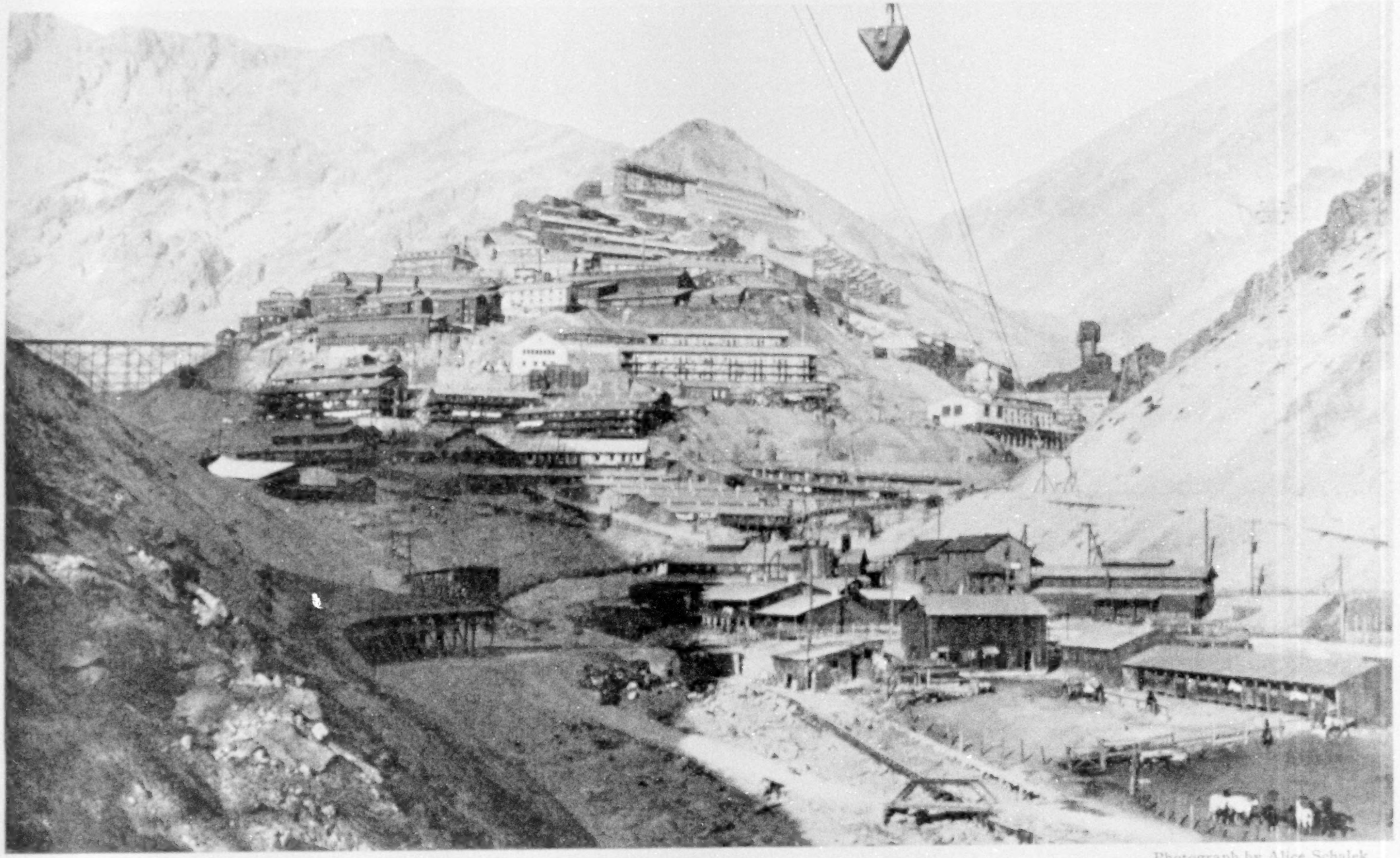
The gold that nations acquire in this way and stow in their treasure vaults costs them nothing. When a million dollars' worth of gold is brought to a treasury, for example, the government accepts it and hands to its owner a million dollars in paper money. The only expense to the government is that incidental to printing the paper.

The government does not, in fact, become the owner of the gold. The person who holds certificates issued against it is its owner. The certificate, or "bill," as it is familiarly called, of course, is as good as gold because it can, at any time, be changed into it, so long as the government exists.

FAITH GIVES VALUE TO MONEY TOKENS

The well-known economist, Dr. Alfred Pearce Dennis, has thus summarized for the NATIONAL GEOGRAPHIC MAGAZINE the meaning of money in its broadest aspects:

It is the conception of faith and credit which lies back of all exchanges based on tokens, whether cowrie shells, wampum,



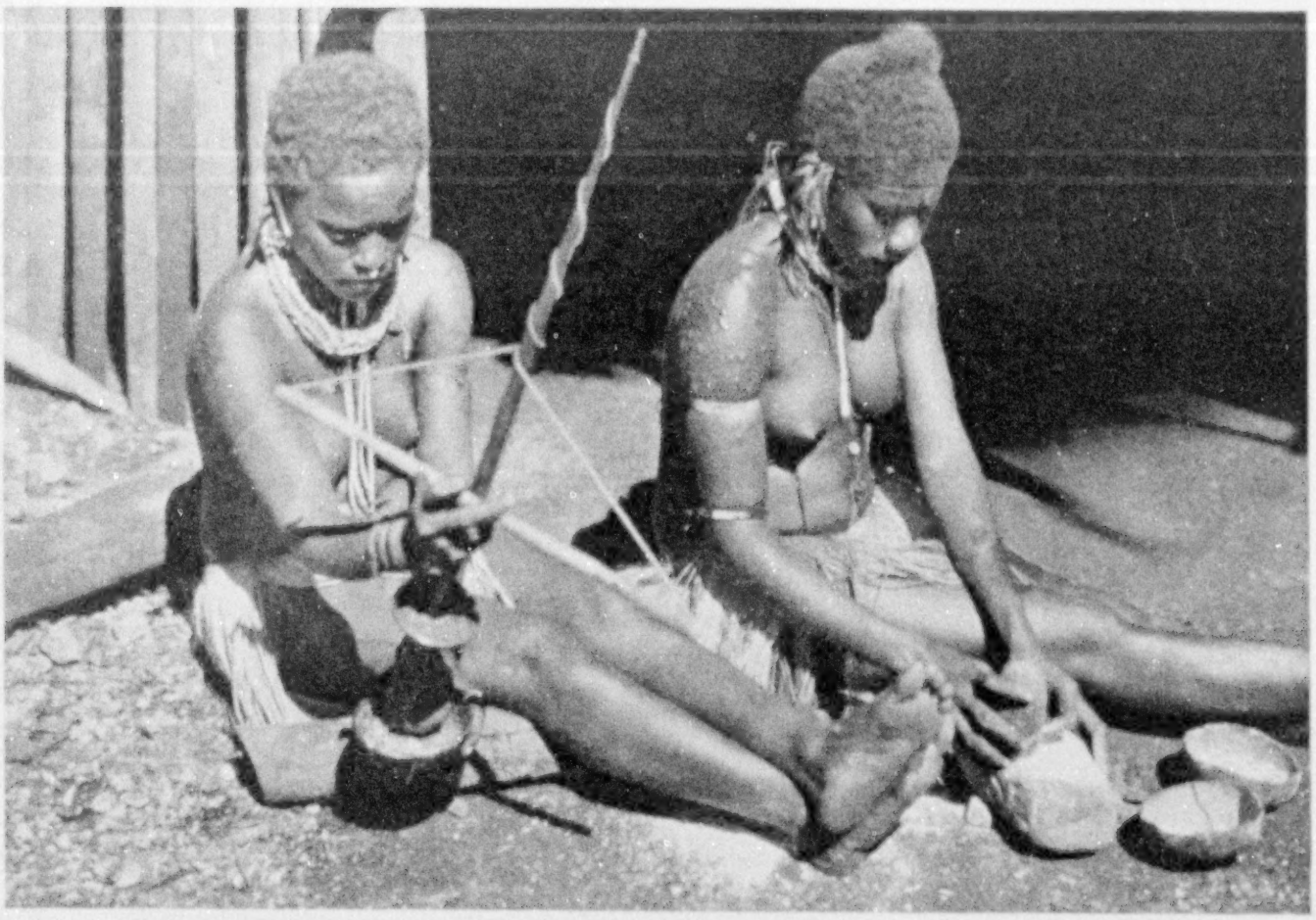
Photograph by Alice Schalek

NO METAL HAS BEEN MORE USEFUL TO THE WORLD'S COINAGE SYSTEMS THAN HAS COPPER, ESPECIALLY FOR MAKING SUBSIDIARY COINS. THE GREAT "TENIENTE" MINE OF SEWELL, CHILE

Photograph from Ernest Peterffy

A MARKET IN POLAND

Since the interchange of products began, countless mediums of exchange have moved through the world's trade marts—from silk and slave girls to rock salt, goats, gold, and precious stones. No detailed illustrations of coins or paper money now in actual circulation in any civilized country of the world appear in this number of the NATIONAL GEOGRAPHIC MAGAZINE. In its ceaseless effort to prevent counterfeiting, the United States Government frowns upon any such reproduction.



Photograph by Merl La Voy

"TURNING AN HONEST PENNY" IN THE SOUTH SEAS

The girl at the right is breaking shell into small pieces. Her sister with the twist-drill makes holes in the pieces, so that they can be strung. Then men grind the "coins" to uniform size, making a shell money known as cowrie, still current in the Solomon Islands (see, also, text, page 745).

greenbacks, gold, copper, or silver, that gives these tokens value. Almost any symbol or token is useful as a medium of exchange so long as it receives general support in the popular consciousness. The value, therefore, of what we call money is measured by the yardstick of faith.

There have been countless vain experiments in fiat money. A case in point is the money issued by the Continental Congress, which depreciated to such an extent that the phrase "not worth a Continental" is still in use to-day.

The Russian peasant in 1921, with the swift depreciation of the ruble, found that he was exchanging something that had an intrinsic value, his wheat that could be eaten, for pieces of paper which had a fictitious and declining value. He, therefore, refused to exchange his wheat for rubles, but instead converted his grain into vodka. Vodka was grain in concentrated form, kept better, had a universal appeal, and an unlimited marketing radius.

From an economic standpoint money performs somewhat the same function in human exchanges that railroad cars perform in the exchange of goods. The Jews suffering persecution in the Middle Ages invented bills of exchange for the invisible transfer of wealth. In these days transfers may be made in a few seconds over thousands of miles of cable.

To-day money as metallic disks forms but a fractional part in exchanges among civilized peoples. Checks, notes, bills of exchange, perform exactly the same function as money in the exchange of commodities. India is one of the poorest countries in the world from the standpoint of per capita wealth, with a pitiful circulation of silver rupees. Yet India has a store of gold amounting to two and one-half billion dollars, or considerably more than half the gold held in the United States. The bulk of the gold in India is hoarded and not put to productive uses.

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15 vegetables **32 ingredients**

Almost a meal!

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Its dividend checks are cashed at banks in every state in the Union, by people representing all trades, stations and professions.

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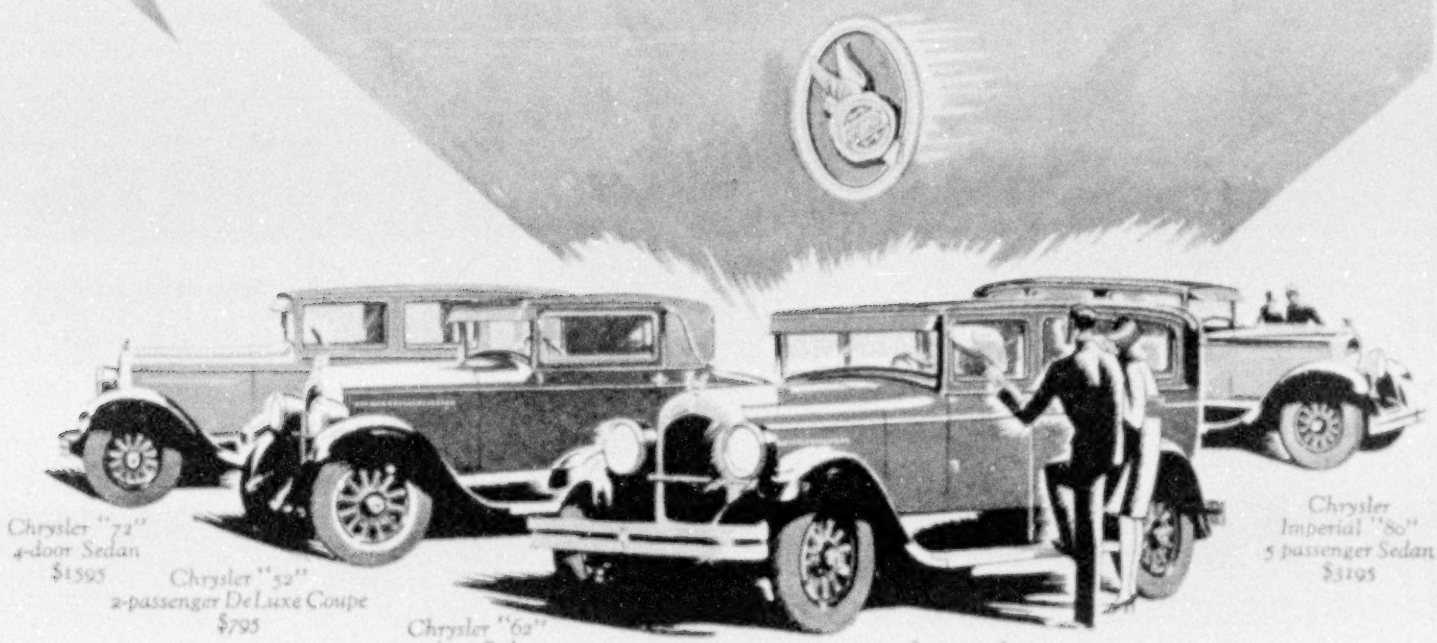

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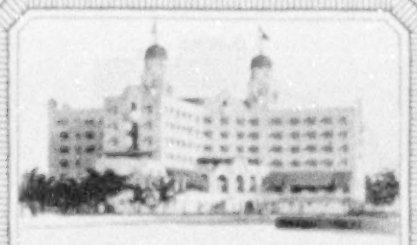

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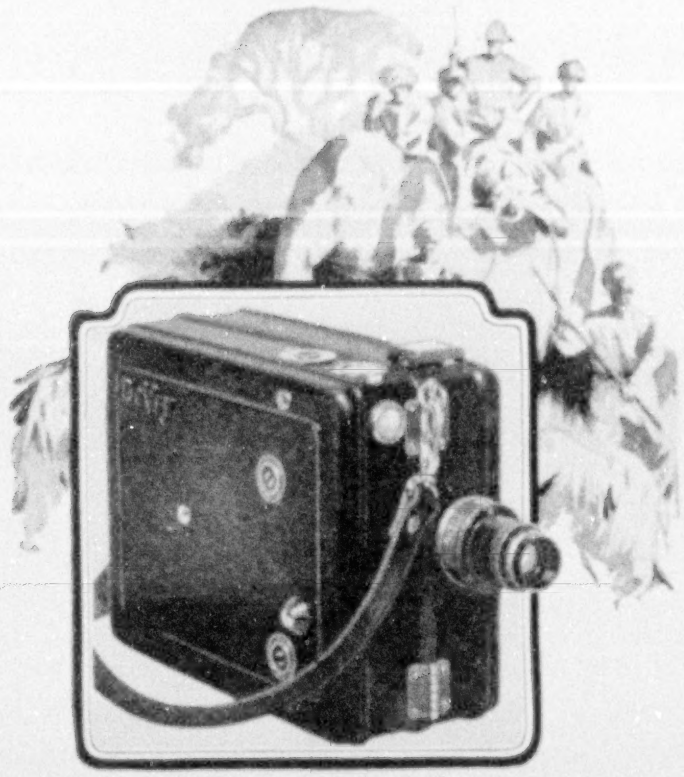

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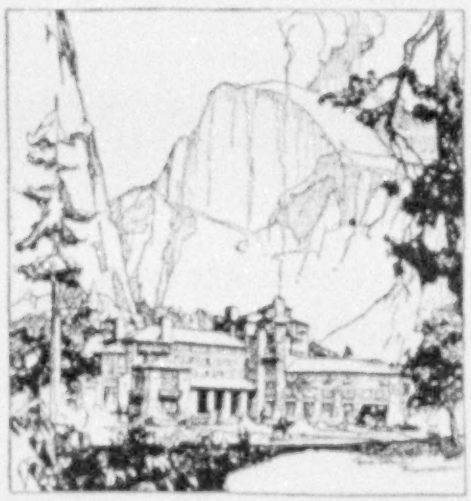

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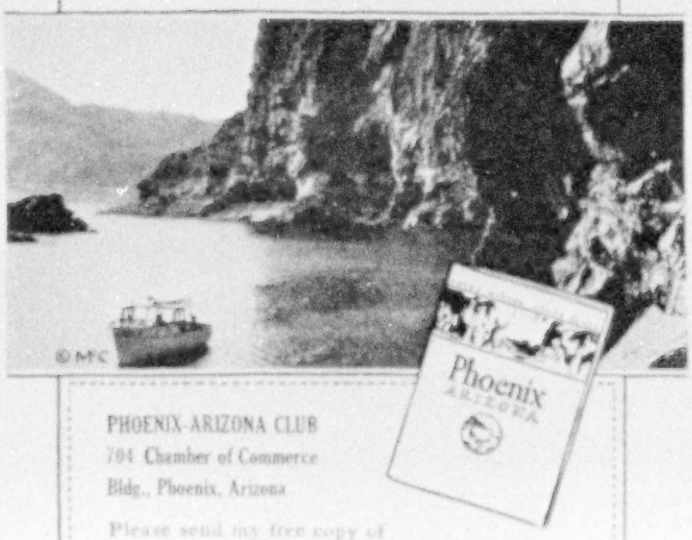

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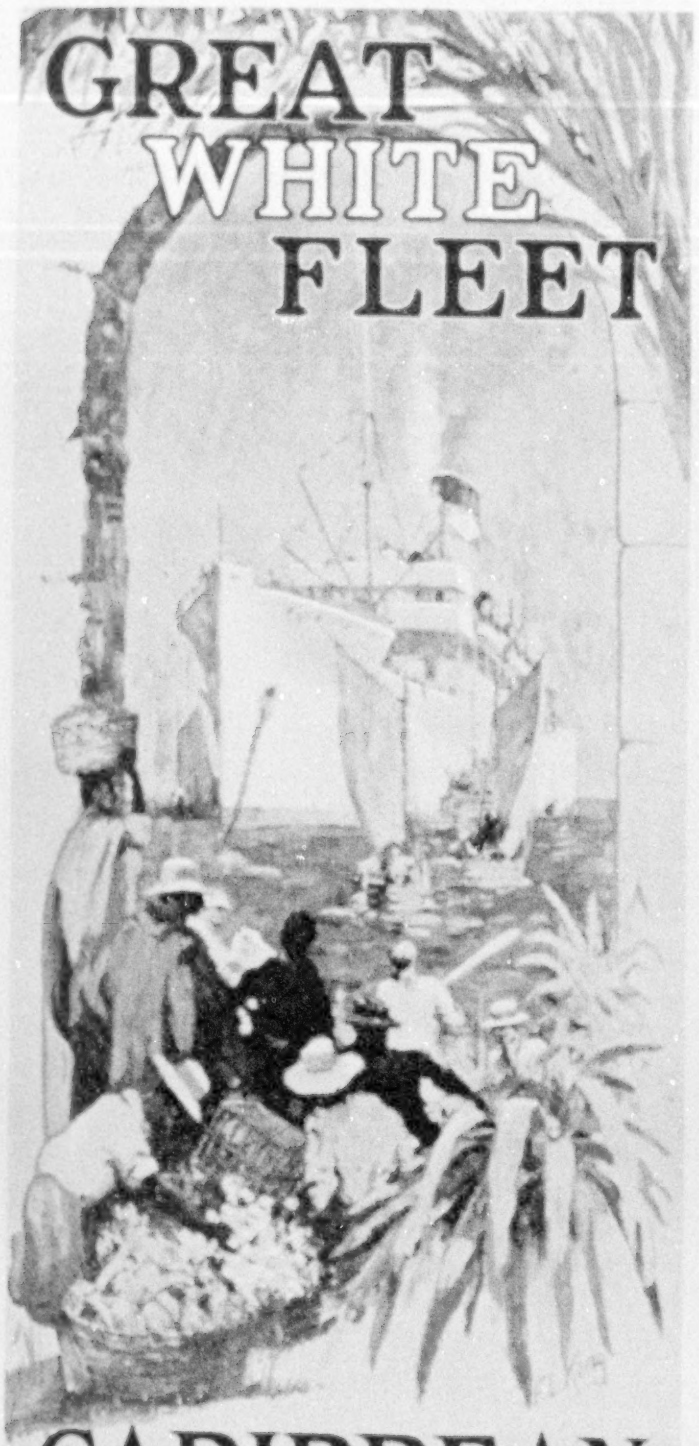

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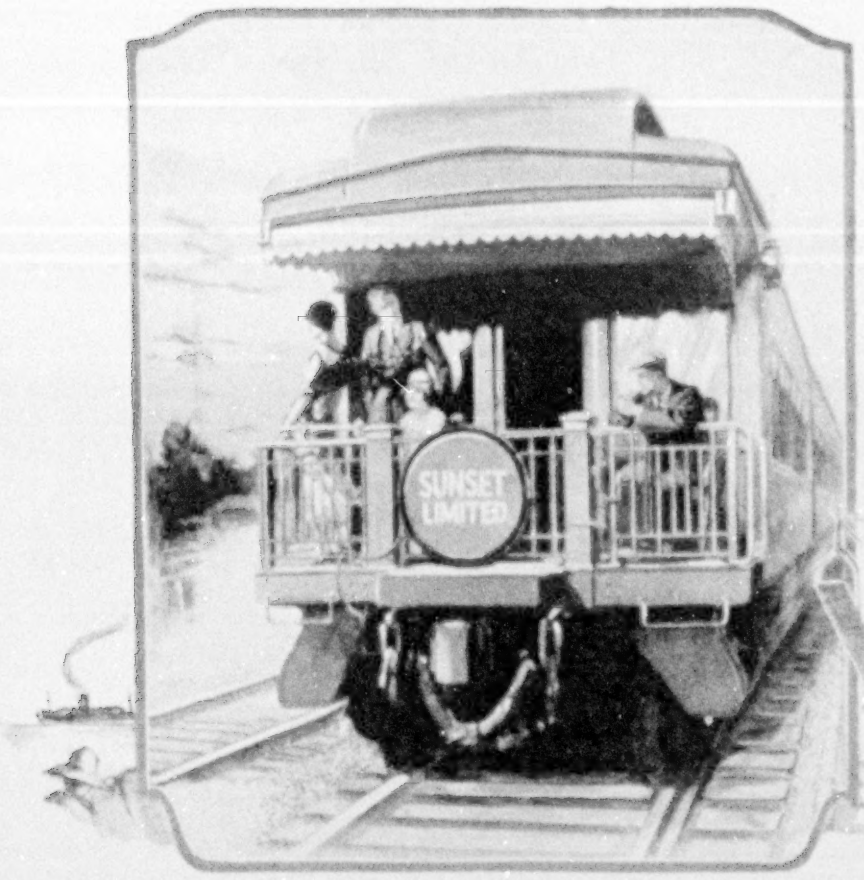

See New Orleans
on Your Way to

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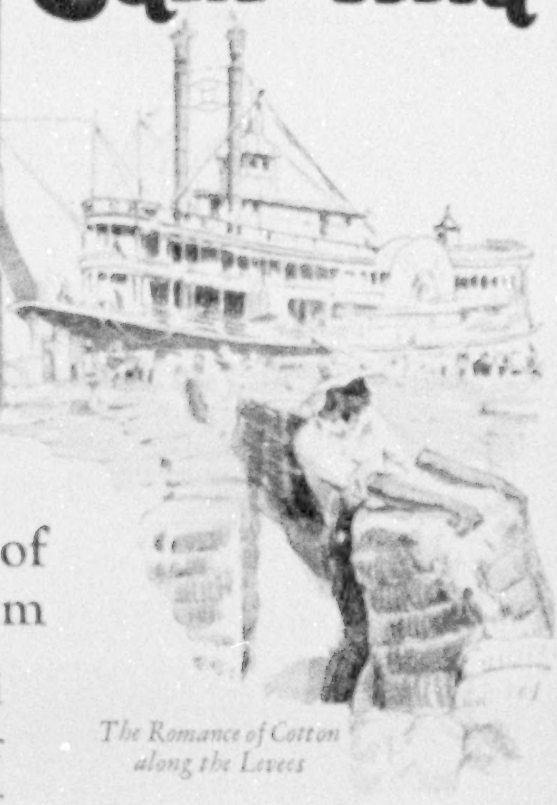

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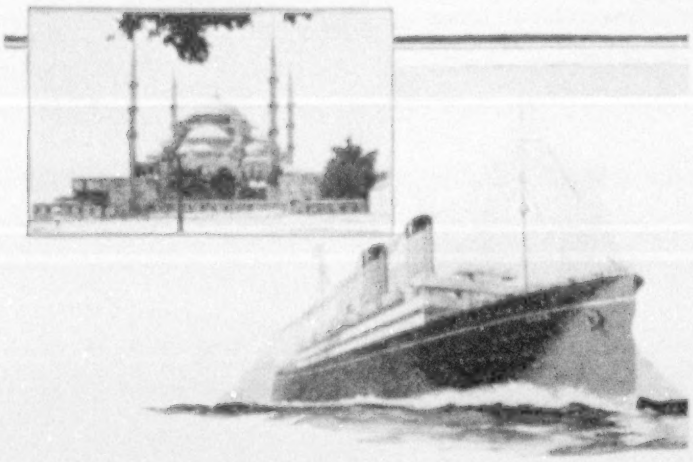

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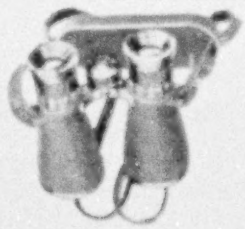

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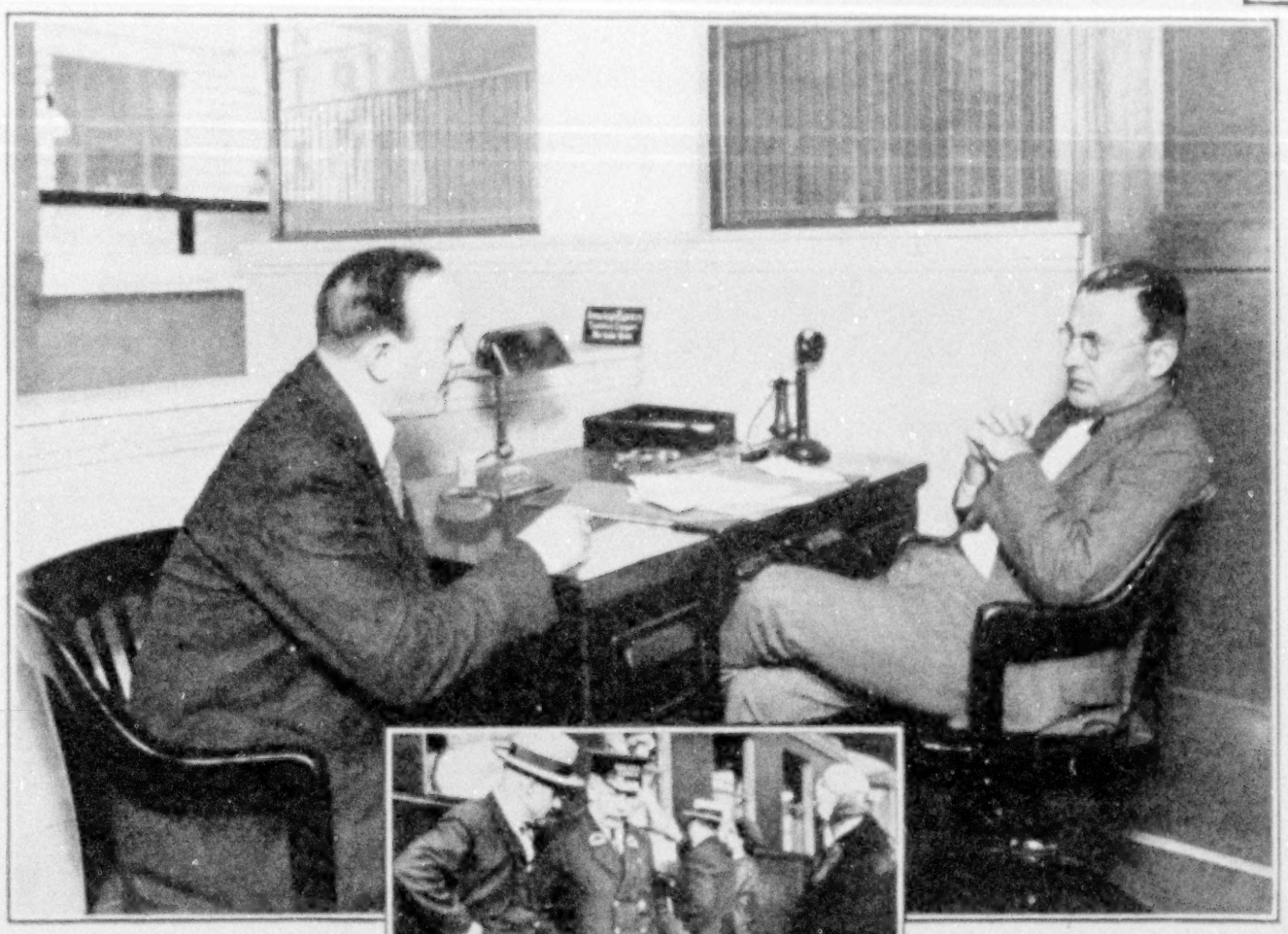

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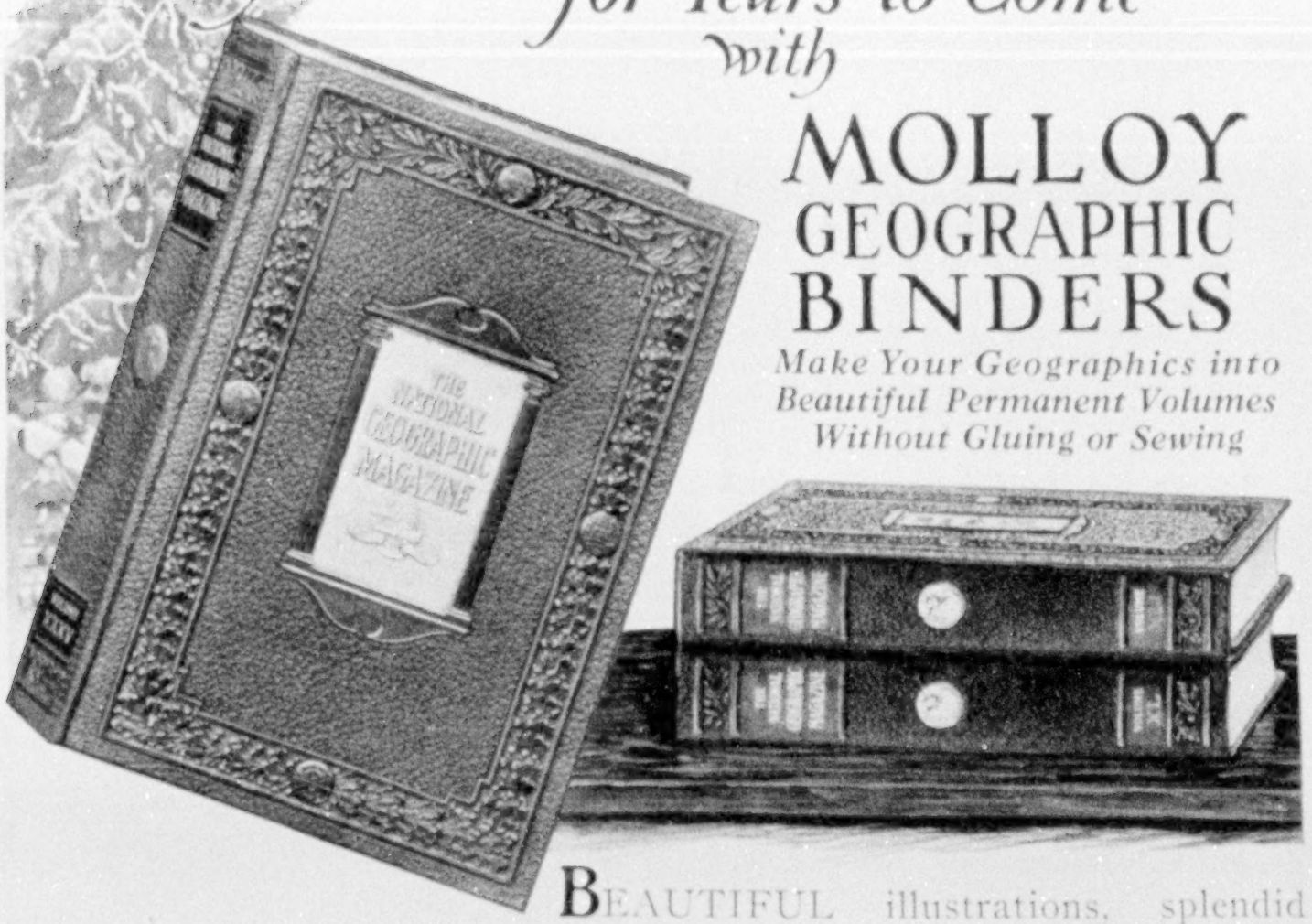

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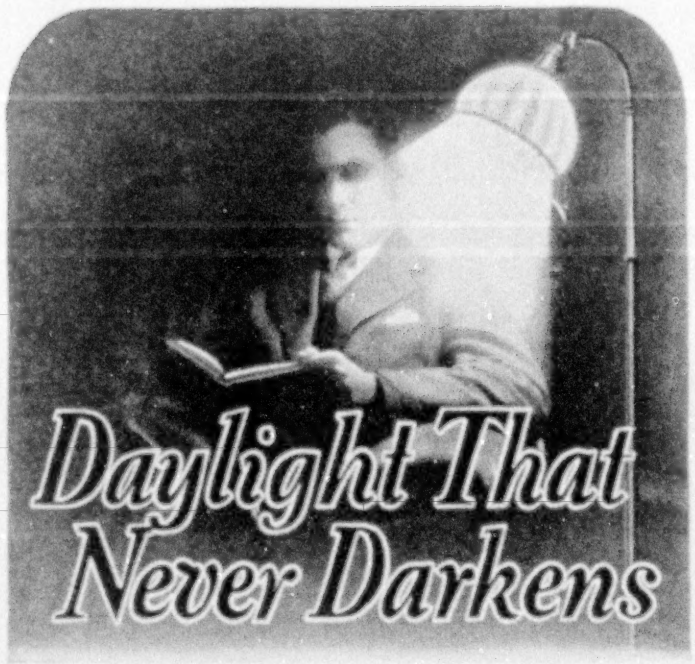

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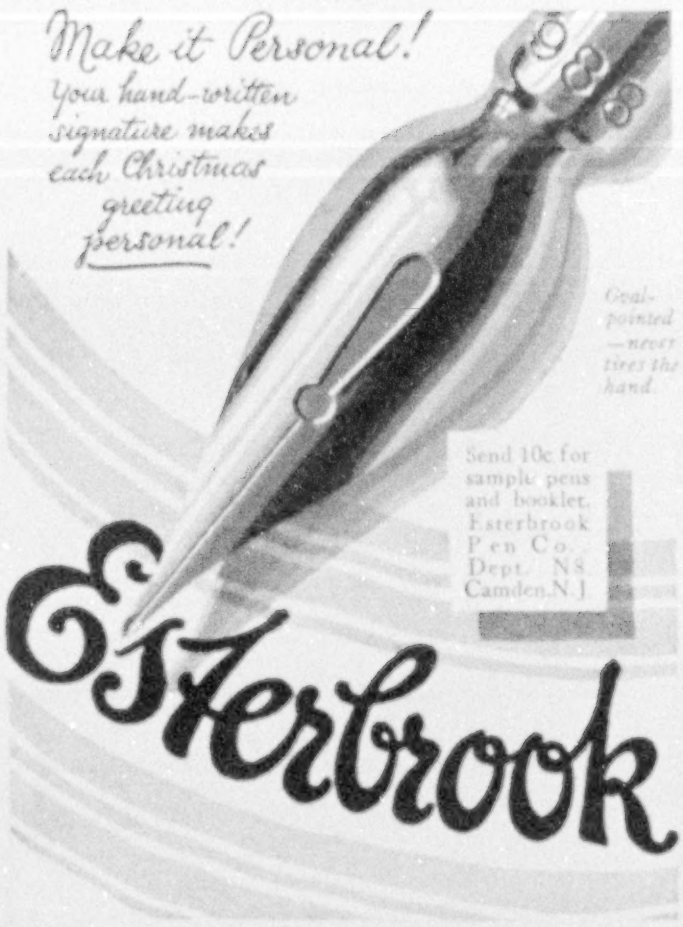

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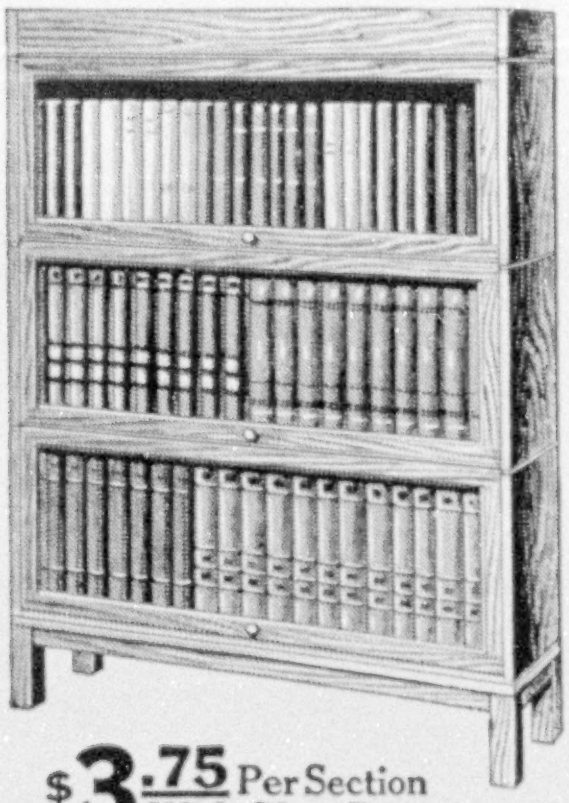

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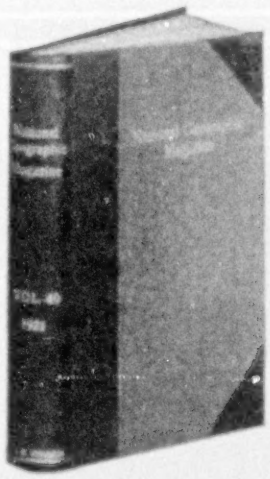

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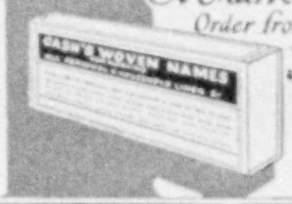

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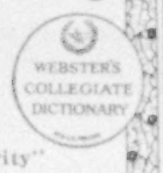

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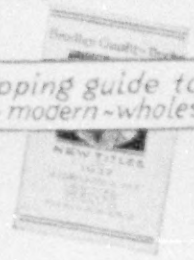

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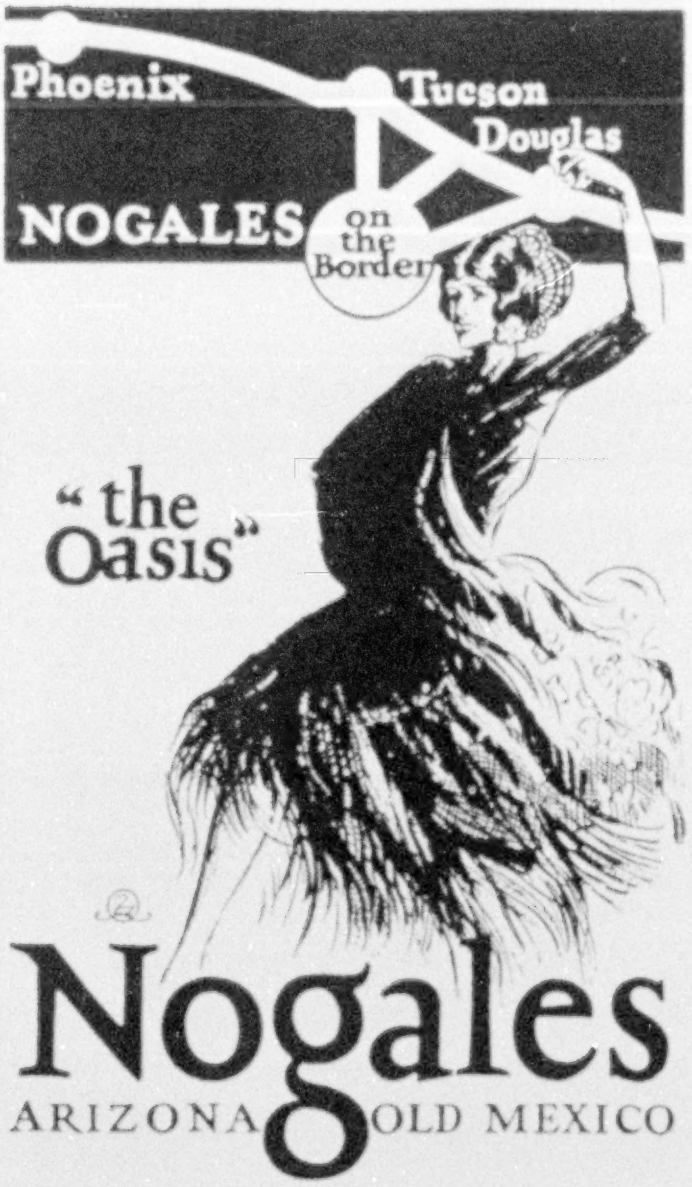

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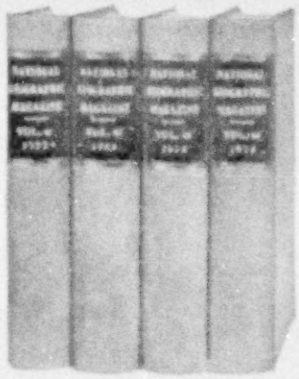

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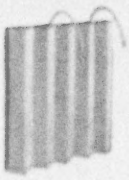

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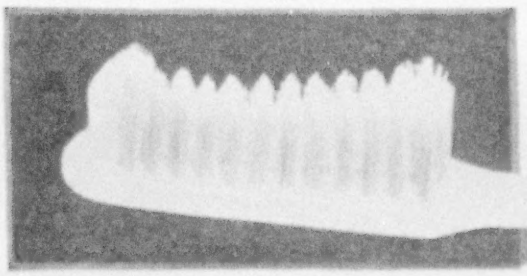

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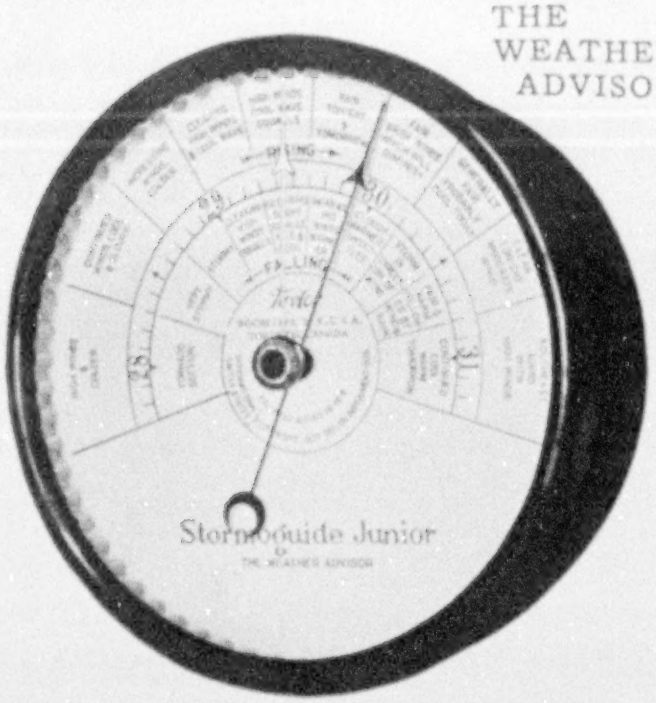

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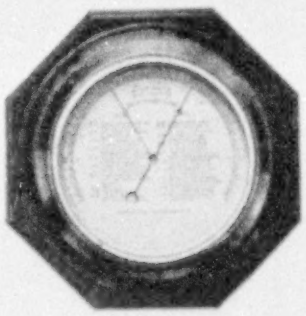

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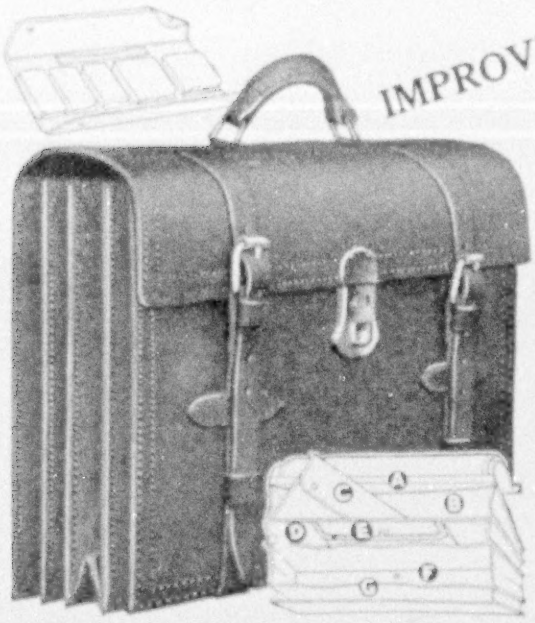

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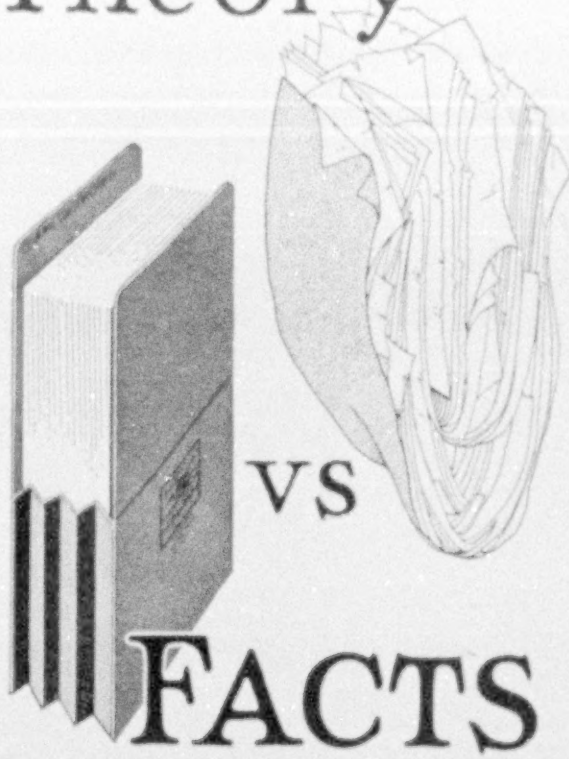

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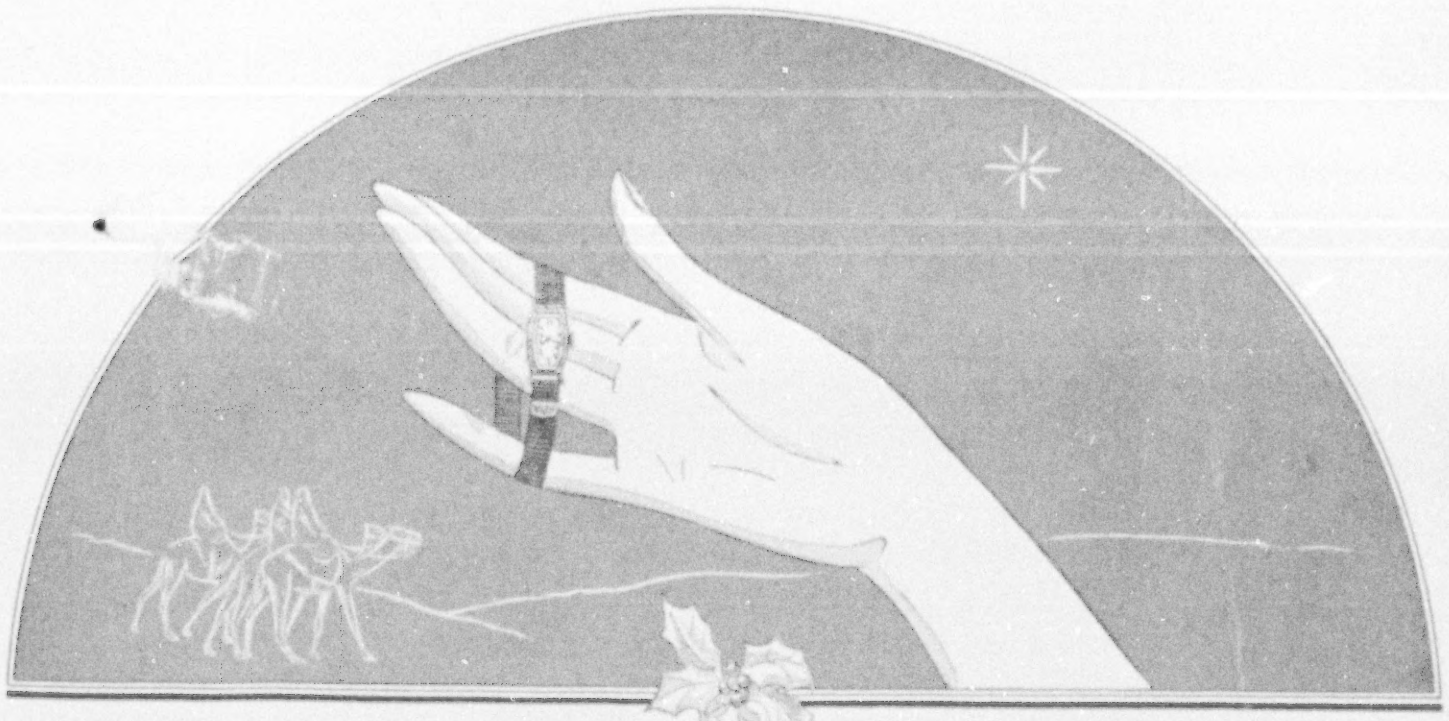

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Parker Duofold Desk Sets

Base of Polished Black Glass—with Parker Duofold Jr. or Lady Duofold Pen $12.

Mandarin Yellow Porcelain Base with Parker Black Pen and Colored Taper $6.50.

Double set of Polished Italian Marble Base. With two Lady or Junior Duofold Pens $28.